

WTIO30 FMEE 250639

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 16/13/20182019

1.A TROPICAL CYCLONE 13 (JOANINHA)

2.A POSITION 2019/03/25 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 17.8 S / 62.7 E

(SEVENTEEN DECIMAL EIGHT DEGREES SOUTH AND
SIXTY TWO DECIMAL SEVEN DEGREES EAST)

MOVEMENT: EAST-SOUTH-EAST 6 KT

3.A DVORAK ANALYSIS: 4.5/5.0/W 0.5/12 H

4.A CENTRAL PRESSURE: 970 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 75 KT

RADIUS OF MAXIMUM WINDS (RMW): 46 KM

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

28 KT NE: 350 SE: 350 SW: 330 NW: 200

34 KT NE: 220 SE: 260 SW: 240 NW: 150

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

64 KT NE: 80 SE: 80 SW: 80 NW: 70

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 1100 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2019/03/25 18 UTC: 18.5 S / 63.4 E, VENT MAX= 075 KT, TROPICAL CYCLONE

24H: 2019/03/26 06 UTC: 19.3 S / 64.1 E, VENT MAX= 075 KT, TROPICAL CYCLONE

36H: 2019/03/26 18 UTC: 19.9 S / 65.0 E, VENT MAX= 070 KT, TROPICAL CYCLONE

48H: 2019/03/27 06 UTC: 20.3 S / 65.9 E, VENT MAX= 070 KT, TROPICAL CYCLONE

60H: 2019/03/27 18 UTC: 20.8 S / 66.6 E, VENT MAX= 065 KT, TROPICAL CYCLONE

72H: 2019/03/28 06 UTC: 21.2 S / 67.1 E, VENT MAX= 065 KT, TROPICAL CYCLONE

2.B LONGER-RANGE OUTLOOK:

96H: 2019/03/29 06 UTC: 22.6 S / 68.5 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

120H: 2019/03/30 06 UTC: 24.9 S / 70.4 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

2.C ADDITIONAL INFORMATION:

T=4.5;CI=5.0-

JOANINHA CLOUD PATTERN BARELY EVOLVED WITH A RAGGED EYE PATTERN
VISIBLE BY PHASE ON INFRARED DATA. CLOUD TOPS WARMED UP SIGNIFICANTLY.

LAST 0206Z WINDSAT SWATH DO NOT SHOW CHANGE IN COMPARISON WITH LAST MICROWAVES. GIVEN LAST OBJECTIVE AND SUBJECTIVE ANALYSES AND 1358Z SMAP DATA (75KT), INTENSITY WAS ADJUSTED TO 75KT.

RECENTLY, THE SYSTEM MOVES EAST-SOUTH-EASTWARD. JOANINHA SHOULD KEEP ON HEADING SOUTHEASTWARDS OVER THE NEXT DAYS, STEERED BY THE NEAR EQUATORIAL RIDGE IN THE NORTH-EAST. FROM WEDNESDAY, A SMALL SUBTROPICAL RIDGE TO THE SOUTH MAY REDUCE THE SPEED OF THE SYSTEM. THEN, DUE TO A BROAD TROUGH AT SOUTH, THE LOW IS EXPECTED TO LEAVE THE TROPICS. THE CURRENT FORECAST IS MAINLY BASED ON THE LAST AMERICAN AND ENGLISH GUIDANCE, THE IFS SHOWS VERY EARLY A STRONG SOUTHWARD BIAS.

DESPITE THE EXCELLENT UPPER DIVERGENCE A NORMAL OCEANIC HEAT CONTENT NORTH OF 25S, THE SYSTEM DO NOT INTENSIFY RAPIDLY, MAYBE IN RELATION WITH ITS INITIAL BROAD STRUCTURE OR THE WEAK WESTERLY UPPER AND MID CONSTRAINT. A DEEPENING IS POSSIBLE UP TO TOMORROW ESPECIALLY GIVEN THE LAST IMAGES. FROM WEDNESDAY, THE SHEAR IS FORECAST TO INCREASE IN ASSOCIATION WITH A DRYER ENVIRONMENT AND A DECREASE OF THE OCEANIC POTENTIAL. JOANINHA IS EXPECTED THEN TO WEAKEN MORE RAPIDLY.

JOANINHA SHOULD AT THE NORTH-EAST OF RODRIGUES ISLAND TOMMOROW MORNING AS A DANGEROUS TROPICAL CYCLONE. GALE FORCE WINDS ARE ALREADY MEASURED AND MAY LAST UNTIL WEDNESDAY MORNING. HOWEVER UNCERTAINTY IS STILL IMPORTANT AND IT IS STILL UNCLEAR HOW FAR JOANINHA WILL BE FROM THE ISLAND AT ITS CLOSEST. THEREFORE THE INHABITANTS ARE INVITED TO CLOSELY MONITOR THE PROGRESS OF JOANINHA AND FOLLOW THE INSTRUCTIONS PROVIDED BY LOCAL AUTHORITIES.