

WTIO30 FMEE 251914

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 15/12/20212022

1.A SEVERE TROPICAL STORM 12 (JASMINE)

2.A POSITION 2022/04/25 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 22.2 S / 41.3 E

(TWENTY TWO DECIMAL TWO DEGREES SOUTH AND
FORTY ONE DECIMAL THREE DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-EAST 10 KT

3.A DVORAK ANALYSIS: 4.0/4.0/D 0.5/6 H

4.A CENTRAL PRESSURE: 982 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 60 KT

RADIUS OF MAXIMUM WINDS (RMW): 41 KM

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

28 KT NE: 165 SE: 165 SW: 165 NW: 110

34 KT NE: 110 SE: 110 SW: 110 NW: 95

48 KT NE: 65 SE: 65 SW: 60 NW: 65

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 500 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/04/26 06 UTC: 22.9 S / 42.2 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 175 SE: 150 SW: 130 NW: 110

34 KT NE: 100 SE: 110 SW: 100 NW: 75

48 KT NE: 45 SE: 45 SW: 55 NW: 35

24H: 2022/04/26 18 UTC: 23.1 S / 43.5 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 110 SE: 120 SW: 140 NW: 95

34 KT NE: 0 SE: 95 SW: 110 NW: 55

36H: 2022/04/27 06 UTC: 22.8 S / 45.8 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=4.0+.

AROUND 15Z, THE JASMINE CLOUD PATTERN EVOLVED INTO AN ILL-DEFINED AND RATHER LARGE EYE PATTERN. THIS CONFIGURATION HAS STARTED TO DEGRADE SINCE 17Z WITH CLOUD TOPS WARMING IN THE EASTERN SEMICIRCLE. MICROWAVE IMAGERY OF THE EVENING (SSMIS FROM 1413Z) SHOWS THAT THE INNER CORE HAS CONSOLIDATED WELL COMPARED TO EARLIER IN THE DAY, WITH THE PRESENCE OF A LARGE BUT WELL-DEFINED EYE IN 91 GHZ. THE INTENSITY IS ESTIMATED AT 60 KT (WELL ABOVE OBJECTIVE ESTIMATES AT 40-50 KT) BASED ON DVORAK'S SUBJECTIVE ANALYSIS CORROBORATED BY A SMAP PASS GIVING WINDS AT 63 KT AT 1533Z.

THE MOVEMENT OF JASMINE REMAINS UNDER THE INFLUENCE OF THE STEERING FLOW CURRENTLY LOCATED IN THE MIDDLE TROPOSPHERE AND CHANNLED BY A RIDGE EAST OF MADAGASCAR AND A TROUGH THAT CIRCULATES FURTHER SOUTH OF THE CHANNEL. FROM TUESDAY ON, THE TRAJECTORY IS TURNING MORE EASTWARD UNDER THE EFFECT OF THE STRONG WESTWARD DIRECTIONAL FLOW, LINKED TO THE MID-TROPOSPHERE FLOW ASSOCIATED WITH THE SLIDING TROUGH SOUTH OF THE CHANNEL AND THE RIDGE THAT PIVOTS NORTH OF THE SYSTEM. THIS IS DIRECTING JASMINE TOWARDS SOUTHWESTERN MADAGASCAR AND THE LATEST FORECAST TRENDS ARE FOR AN EARLIER ARRIVAL ON THE MALAGASY COAST AND SIGNIFICANTLY FURTHER SOUTH THAN PREVIOUSLY FORECAST. THE LANDFALL SHOULD BE DONE IN THE NEXT 24 HOURS (POTENTIALLY EVEN EARLIER THAN WHAT IS INDICATED IN THE OFFICIAL FORECAST)

IN TERMS OF INTENSITY, THE ENVIRONMENTAL CONDITIONS SHOULD GRADUALLY DETERIORATE FROM TUESDAY WITH THE INCREASE OF THE WESTERLY SHEAR COMBINED WITH AN INTRUSION OF DRY AIR IN THE MIDDLE TROPOSPHERE. IT IS THEREFORE A SYSTEM IN A WEAKENING PHASE THAT SHOULD APPROACH THE COASTS BUT WHICH WILL STILL BE ASSOCIATED WITH STRONG WINDS (UPPER STAGE OF THE MODERATE STORM EXPECTED BUT IT IS NOT IMPOSSIBLE THAT THE SYSTEM SUCCEEDS IN MAINTAINING THE STAGE OF STRONG TROPICAL STORM).

IMPACTS ON INHABITED LANDS :

-MADAGASCAR: LANDFALL IN 24 HOURS OR LESS IN THE TULEAR AREA. MAXIMUM GUSTS UP TO 120 OR EVEN 130 KM/H ARE POSSIBLE DURING THE LANDFALL WITH HEAVY RAINFALL INTENSITIES THAT CAN GIVE RAINFALL TOTALS OF ABOUT 150MM/24H. SURGE OF ABOUT 10 TO 30 CM MAY CAUSE MINOR FLOODING IN EXPOSED AREAS.