

WTIO30 FMEE 250635

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 13/12/20212022

1.A SEVERE TROPICAL STORM 12 (JASMINE)

2.A POSITION 2022/04/25 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 20.6 S / 40.3 E

(TWENTY DECIMAL SIX DEGREES SOUTH AND
FORTY DECIMAL THREE DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-EAST 10 KT

3.A DVORAK ANALYSIS: 3.5/3.5/S 0.0/6 H

4.A CENTRAL PRESSURE: 990 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 50 KT

RADIUS OF MAXIMUM WINDS (RMW): 28 KM

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

28 KT NE: 165 SE: 205 SW: 150 NW: 110

34 KT NE: 95 SE: 110 SW: 100 NW: 75

48 KT NE: 35 SE: 35 SW: 40 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/04/25 18 UTC: 21.8 S / 40.8 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

28 KT NE: 165 SE: 140 SW: 0 NW: 110

34 KT NE: 95 SE: 95 SW: 0 NW: 75

48 KT NE: 35 SE: 0 SW: 0 NW: 35

24H: 2022/04/26 06 UTC: 22.5 S / 41.6 E, VENT MAX= 065 KT, TROPICAL CYCLONE

28 KT NE: 175 SE: 155 SW: 130 NW: 120

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

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

64 KT NE: 35 SE: 0 SW: 35 NW: 35

36H: 2022/04/26 18 UTC: 22.4 S / 42.6 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 110 SE: 140 SW: 130 NW: 110

34 KT NE: 65 SE: 100 SW: 95 NW: 65

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

48H: 2022/04/27 06 UTC: 22.0 S / 43.7 E, VENT MAX= 040 KT, OVERLAND DEPRESSION

28 KT NE: 95 SE: 0 SW: 0 NW: 110

34 KT NE: 0 SE: 0 SW: 0 NW: 65

60H: 2022/04/27 18 UTC: 21.1 S / 44.4 E, VENT MAX= 030 KT, OVERLAND DEPRESSION
28 KT NE: 0 SE: 0 SW: 185 NW: 120

72H: 2022/04/28 06 UTC: 20.2 S / 44.7 E, VENT MAX= 025 KT, DISSIPATING

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=3.5+

NO EVOLUTION DURING THE LAST 6 HOURS, THE CURVED BAND CLOUD PATTERN OF JASMINE HAS BEEN MAINTAINED WITH A SLIGHT DECREASE OF THE ROLL EXTENSION AND A LESS MARKED CONVECTION. THE SSMIS DATA FROM 0120UTC STILL SHOW A SLIGHT SHEAR AND A BETTER DEFINED STRUCTURE IN THE MID-TROPOSPHERE, WITH AN EYE JUSTIFYING WINDS OF ABOUT 50KT. THE SUBJECTIVE DVORAK ANALYSIS AND THE ADT REMAIN CLOSE TO 3.5., THE INTENSITY IS MAINTAINED AT 50KT. OBSERVATIONS FROM THE EUROPA STATION AS WELL AS FROM A NEARBY BOAT VALIDATE THE WIND EXTENSIONS.

THE MOVEMENT OF JASMINE IS SLIGHTLY ACCELERATED TO THE SOUTHEAST, ALLOWING IT TO PARTIALLY ESCAPE THE SHEAR STRESS. THE STEERING FLOW IS CURRENTLY LOCATED IN THE MID-TROPOSPHERE, CHANNLED BY A RIDGE EAST OF MADAGASCAR AND A TROUGH THAT CIRCULATES FURTHER SOUTH OF THE CHANNEL. THIS LEAVES A TRACK GLOBALLY TOWARDS SOUTH-SOUTHEAST DURING THE NEXT 18 HOURS. FROM TUESDAY, THE TRACK BECOMES VERY UNCERTAIN, DEPENDING ON THE INTENSITY OF THE SYSTEM AT THAT TIME. THE CHOICE OF THE RSMC IS A MORE OR LESS MARKED TURN TO THE EAST UNDER THE EFFECT OF THE STRONG WESTERN COMPONENT OF THE STEERING FLOW, LINKED TO THE MID-TROPO FLOW ASSOCIATED WITH THE SLIDING TROUGH SOUTH OF THE CHANNEL. THIS DIRECTS JASMINE TOWARDS THE SOUTH-WEST OF MADAGASCAR, BUT THE MODELS ARE STRONGLY SCATTERED. A LANDFALL OVER SOUTH-WESTERN MADAGASCAR SEEMS POSSIBLE FROM TUESDAY EVENING OR WEDNESDAY.

IN TERMS OF INTENSITY, JASMINE BENEFITS FROM GOOD ENVIRONMENTAL CONDITIONS UNTIL TUESDAY MORNING (GOOD ALTITUDE DIVERGENCE, STRONG OCEANIC POTENTIAL), DESPITE THE PERSISTENCE OF A MODERATE SHEAR STRESS THAT THE SYSTEM COMPENSATES BY A FAST MOVEMENT. A SLOWER DISPLACEMENT COULD MARK A FASTER WEAKENING AND A MORE NORTHWARD TRACK. FROM TUESDAY ONWARDS, THE INCREASE IN WESTERLY SHEAR, LINKED TO THE PASSAGE OF THE TROUGH FURTHER SOUTH, COMBINED WITH AN INTRUSION OF DRY AIR IN THE MID-TROPOSPHERE SHOULD WEAKEN THE SYSTEM MORE OR LESS RAPIDLY BEFORE ITS APPROACH TO MADAGASCAR. IN CASE OF A LANDFALL ON MADAGASCAR, A CLASSICAL WEAKENING IS ALSO EXPECTED ON THE LAND. AS A CONSEQUENCE, IT IS LIKELY THAT THE SYSTEM WILL DISSIPATE TOTALLY ON LAND BY THURSDAY OR FRIDAY.

IMPACTS ON INHABITED LANDS:

-SOUTH MOZAMBIQUE CHANNEL ISLANDS (BASSAS DA INDIA, EUROPA) :

DEGRADATION EXPECTED THIS MONDAY WITH GUSTS WHICH CAN APPROACH 120 KM/H DURING THE CLOSEST PASSAGE IN THE NIGHT OF MONDAY TO TUESDAY, CUMULATED RAIN IN THE ORDER OF 100/150 MM IN 24 HOURS AND WAVES OF 4 TO 5 METERS BREAKING ON THE NORTHERN FACADES OF THE ISLANDS THEN WEAKENING GRADUALLY.

-MADAGASCAR : LANDFALL IS POSSIBLE (BUT NOT GUARANTEED) FROM TUESDAY EVENING OR WEDNESDAY BETWEEN THE REGIONS OF TULEAR AND MORONDAVA, BUT WITH HIGH UNCERTAINTY ON TIMING, LOCATION AND INTENSITY. MAXIMUM GUSTS OF ABOUT 100KM/H ARE EXPECTED DURING THE LANDFALL WITH RAINFALL AMOUNTS OF ABOUT 150MM/24H.