

WTIO30 FMEE 251221

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 14/12/20212022

1.A SEVERE TROPICAL STORM 12 (JASMINE)

2.A POSITION 2022/04/25 AT 1200 UTC:

WITHIN 10 NM RADIUS OF POINT 21.2 S / 40.8 E

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

MOVEMENT: SOUTH-SOUTH-EAST 8 KT

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

4.A CENTRAL PRESSURE: 984 HPA

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

RADIUS OF MAXIMUM WINDS (RMW): 26 KM

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

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

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

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/04/26 00 UTC: 21.7 S / 41.3 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 165 SE: 140 SW: 120 NW: 100

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

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

24H: 2022/04/26 12 UTC: 22.1 S / 42.2 E, VENT MAX= 045 KT, MODERATE TROPICAL  
STORM

28 KT NE: 155 SE: 140 SW: 150 NW: 120

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

36H: 2022/04/27 00 UTC: 22.1 S / 43.2 E, VENT MAX= 040 KT, MODERATE TROPICAL  
STORM

28 KT NE: 0 SE: 0 SW: 100 NW: 95

34 KT NE: 0 SE: 0 SW: 75 NW: 55

48H: 2022/04/27 12 UTC: 21.7 S / 44.1 E, VENT MAX= 030 KT, OVERLAND DEPRESSION

28 KT NE: 0 SE: 0 SW: 165 NW: 95

60H: 2022/04/28 00 UTC: 21.2 S / 44.8 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

72H: 2022/04/28 12 UTC: 21.1 S / 45.5 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK:  
NIL

2.C ADDITIONAL INFORMATION:  
T=CI=3.5

THE CURVED BAND CLOUD PATTERN OF JASMINE HAS BEEN MAINTAINED DURING THE LAST 6 HOURS WITH AN ROLL EXTENSION THAT PERSISTS. THE LAST LOCATIONS ALLOW TO NOTE THAT JASMINE MAINTAINS ITS SPEED OF MOVEMENT AROUND 8KT. WITH THE EXISTING SHEAR CONDITIONS, THIS SPEED OF MOVEMENT WILL NOT ALLOW THE SYSTEM TO MAINTAIN OR INCREASE ITS INTENSITY. THE EYE STRUCTURE VISIBLE ON THE GPM DATA OF 0720UTC IN LOW LAYERS CONFIRMS WINDS OF ABOUT 50KT, VALIDATING THE DVORAK ESTIMATE.

JASMINE'S SOUTH-SOUTHEASTWARD MOVEMENT STAGNATES AT A SPEED OF 8KT UNDER THE INFLUENCE OF THE DIRECTIONAL FLOW CURRENTLY LOCATED IN THE MID-TROPOSPHERE, CHANNLED BY A RIDGE EAST OF MADAGASCAR AND A TROUGH THAT CIRCULATES FURTHER SOUTH OF THE CHANNEL. FROM TUESDAY, THE TRACK WILL BE MORE EASTWARD UNDER THE EFFECT OF THE STRONG WESTERLY DIRECTIONAL 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, A SCENARIO WHICH IS MORE AND MORE MARKED IN THE MODELS. A LANDFALL OVER SOUTH-WESTERN MADAGASCAR SEEMS POSSIBLE FROM TUESDAY EVENING OR WEDNESDAY.

IN TERMS OF INTENSITY, WITH THE SLOWER MOVEMENT OF JASMINE WHICH ONLY PARTIALLY COMPENSATES FOR THE SHEAR CONDITIONS, THE SYSTEM WILL HAVE DIFFICULTY INTENSIFYING DESPITE A GOOD UPPER LEVEL DIVERGENCE AND A STRONG OCEANIC POTENTIAL. THE SYSTEM WILL THEREFORE TRANSIT NEAR EUROPA WITH A LOWER INTENSITY COMPARED TO PREVIOUS FORECASTS. STARTING ON TUESDAY, THE INCREASE IN WESTERLY SHEAR COMBINED WITH AN INTRUSION OF DRY AIR IN THE MID-TROPOSPHERE SHOULD WEAKEN THE SYSTEM MORE MARKEDLY BEFORE IT MAKES LANDFALL ON MADAGASCAR. ONCE ON LAND, JASMINE SHOULD DISSIPATE COMPLETELY OVER LAND BY THURSDAY, LEAVING A RESIDUAL VORTEX THAT COULD EMERGE OVER THE EAST COAST OF MADAGASCAR IN THE LONGER TERM.

IMPACTS ON INHABITED LANDS:

-SOUTH MOZAMBIQUE CHANNEL ISLANDS (EUROPA) : DEGRADATION EXPECTED THIS MONDAY WITH GUSTS WHICH CAN APPROACH 100 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 FROM TUESDAY EVENING OR WEDNESDAY BETWEEN THE REGIONS OF TULEAR AND MORONDAVA. MAXIMUM GUSTS OF ABOUT 100KM/H ARE EXPECTED DURING THE LANDFALL WITH RAINFALL AMOUNTS OF ABOUT 150MM/24H.

