

WTIO30 FMEE 260701

RSMC / TROPICAL CYCLONE CENTER / LA REUNION  
TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 17/12/20212022

1.A SEVERE TROPICAL STORM 12 (JASMINE)

2.A POSITION 2022/04/26 AT 0600 UTC:

WITHIN 10 NM RADIUS OF POINT 23.1 S / 42.3 E

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

MOVEMENT: EAST-SOUTH-EAST 8 KT

3.A DVORAK ANALYSIS: 3.0/3.5/W 1.0/12 H

4.A CENTRAL PRESSURE: 989 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 55 KT

RADIUS OF MAXIMUM WINDS (RMW): 37 KM

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

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

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

48 KT NE: 55 SE: 55 SW: 60 NW: 55

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1011 HPA / 500 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/04/26 18 UTC: 23.4 S / 44.6 E, VENT MAX= 030 KT, OVERLAND DEPRESSION

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

24H: 2022/04/27 06 UTC: 23.3 S / 47.5 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=3.0+ CI=3.5

OVER THE LAST HOURS, JASMINE'S PATTERN HAS EVOLVED INTO A CURVED BAND  
STRUCTURE WRAPPING AROUND THE CENTER IN THE SOUTHEASTERN QUADRANT.  
HOWEVER, CLOUD TOPS HAVE WARMED UP AND CONVECTIVE ACTIVITY SEEMS TO

STRUGGLE, WITH EPISODIC BURSTS. THIS IS PROBABLY RELATED TO THE INCREASE OF THE WESTERLY SHEAR AND THE FIRST INTRUSIONS OF DRY AIR. NEVERTHELESS, THE MICROWAVE DATA FROM LATE NIGHT ( 0127Z SSMIS) AND ESPECIALLY THE 0603Z ASCAT CONFIRM THE SOLIDITY OF THE LOW LEVEL CIRCULATION AND THE PERSISTENCE OF STORM FORCE WINDS. THE INTENSITY IS THEREFORE MAINTAINED AT 55KT.

JASMINE PROGRESSIVELY BEND EAST-SOUTHEASTWARD LASTLY, UNDER THE INFLUENCE OF THE RIDGE AT ITS NORTH-EAST AND THE WESTERLY FLOW ON THE EDGE OF THE MID LATITUDES TROUGH. THE SYSTEM IS EXPECTED TO KEEP THIS EASTWARD TRACK TO THE SOUTHWEST OF MADAGASCAR. THE LANDFALL SHOULD OCCURED AT THE END OF THE DAY OR AT THE BEGINNING OF THE NIGHT NEAR THE CITY OF TOLIARA.

IN TERMS OF INTENSITY, ENVIRONMENTAL CONDITIONS SHOULD GRADUALLY DETERIORATE TODAY WITH THE INCREASE IN WESTERLY SHEAR COMBINED WITH AN INTRUSION OF DRY MID-TROPOSPHERE AIR. BUT DEPENDING ON THE SPEED OF MOVEMENT, THERE IS SOME UNCERTAINTY ABOUT THE TIMING AND SO THE REAL IMPACT OF THIS DETERIORATION.

THE SYSTEM SHOULD THEN RAPIDLY WEAKEN ON LAND. THE REMANANT LOW COULD EMERGE ON WEDNESDAY OFF THE SOUTHEAST COAST OF MADAGASCAR BUT SHOULD RAPIDLY MERGE WITH A COLD FRONT IN A HOSTILE ENVIRONMENT.

IMPACTS ON INHABITED LANDS:

THE WEATHER DETERIORATION HAS STARTED NEAR TOLIARA AND THE CONDITIONS SHOULD WORSEN IN THE NEXT HOURS. MAXIMUM GUSTS OF 130 KM/H ARE POSSIBLE NEAR THE LANDING AREA. HEAVY RAINS MAY GIVE RAINFALL TOTALS AROUND 100 TO 150 MM IN A FEW HOURS SOUTH OF THE TRACK. A SURGE IN THE ORDER OF 10 TO 30 CM MAY CAUSE FLOODING IN EXPOSED AREAS WITH THE SWELLS.