

WTIO30 FMEE 240616

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 9/12/20212022

1.A MODERATE TROPICAL STORM 12 (JASMINE)

2.A POSITION 2022/04/24 AT 0600 UTC:

WITHIN 30 NM RADIUS OF POINT 17.6 S / 39.5 E

(SEVENTEEN DECIMAL SIX DEGREES SOUTH AND
THIRTY NINE DECIMAL FIVE DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-WEST 6 KT

3.A DVORAK ANALYSIS: 3.0/3.0/D 0.5/12 H

4.A CENTRAL PRESSURE: 999 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 40 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 205 SE: 165 SW: 220 NW: 110

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/04/24 18 UTC: 18.9 S / 39.7 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 175 SE: 140 SW: 0 NW: 100

34 KT NE: 85 SE: 85 SW: 0 NW: 65

24H: 2022/04/25 06 UTC: 19.9 S / 40.1 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 155 SE: 110 SW: 0 NW: 120

34 KT NE: 65 SE: 75 SW: 0 NW: 65

36H: 2022/04/25 18 UTC: 20.8 S / 40.5 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 165 SE: 130 SW: 0 NW: 120

34 KT NE: 65 SE: 95 SW: 0 NW: 65

48H: 2022/04/26 06 UTC: 21.3 S / 41.0 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 155 SE: 140 SW: 120 NW: 95

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

60H: 2022/04/26 18 UTC: 21.0 S / 41.8 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM

28 KT NE: 110 SE: 100 SW: 130 NW: 95

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

72H: 2022/04/27 06 UTC: 20.1 S / 42.2 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

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

2.B LONGER-RANGE OUTLOOK:

96H: 2022/04/28 06 UTC: 17.6 S / 42.4 E, VENT MAX= 025 KT, FILLING UP

120H: 2022/04/29 06 UTC: 16.3 S / 42.3 E, VENT MAX= 020 KT, REMNANT LOW

2.C ADDITIONAL INFORMATION:

T=CI=3.0-

OVER THE LAST 6 HOURS, TROPICAL STORM JASMINE HAS CONTINUED TO MOVE THROUGH THE CHANNEL WITH A FLUCTUATING CLOUD PATTERN. CLASSIC IMAGERY ALLOWS TO IDENTIFY A CENTER ON THE SOUTH-WESTERN EDGE OF CONVECTION IN A STILL SHEARED ENVIRONMENT. THE DVORAK ANALYSIS IN A SHEAR SYSTEM GIVES AN INTENSITY OF 3.0- MAXIMUM WINDS AROUND 40KT.

WITH THE INTENSIFICATION OF THE SYSTEM, THE STEERING FLOW IS RESUMED IN THE MIDDLE TROPOSPHERE BY THE PROGRESSIVE APPROACH OF A WEAK TROUGH OVER SOUTHERN AFRICA A RIDGE EAST AND SOUTHEAST. THE MOVEMENT WILL THEN TURN MORE SOUTHWARD ON THE NEXT HOURS, THEN SOUTHEAST ON MONDAY, WITH A TEMPORARY SLOWDOWN.

WITH THE TURNING OF THE TROUGH OFF THE SOUTH OF THE MOZAMBIQUE CHANNEL ON TUESDAY AND THE SWELLING OF A NEW RIDGE OVER SOUTHERN AFRICA IN THE MIDDLE OF THE WEEK, COMBINED WITH A WEAKENING OF THE SYSTEM, IT SHOULD TURN BACK AND MOVE BACK NORTHWARDS FROM TUESDAY. A VERY STRONG DISPERSION PERSISTS BETWEEN THE NUMERICAL MODELS, LETTING THE SYSTEM CIRCULATE MORE OR LESS NEAR THE COASTS OF MADAGASCAR OR MOZAMBIQUE. THE SCENARIO SELECTED BY THE RSMC IS CLOSE TO THE ENSEMBLE AND DETERMINIST FORECASTS OF THE EUROPEAN CENTER, AND KEEPS THE SYSTEM AT SEA FOR A LONG TIME IN THE MOZAMBIQUE CHANNEL UNTIL IT DISSIPATES. THE OFFICIAL TRACK IS HOWEVER REVISED SLIGHTLY FURTHER EAST THAN THE PREVIOUS.

IN TERMS OF INTENSITY, JASMINE BENEFITS GENERALLY FROM GOOD ENVIRONMENTAL CONDITIONS UNTIL TUESDAY, DESPITE THE PRESENCE OF A SMALL SHEAR. THE STORM SHOULD STILL EVOLUATE IN GOOD UPPER LEVEL CONDITIONS (WEAK SHEAR, AND GOOD DIVERGENCE MARKED BY A POLAR COAST EVACUATION CHANNEL). THUS, AN INTENSIFICATION TO THE SEVERE TROPICAL STORM STAGE IS POSSIBLE ON SUNDAY BUT THIS IS NO LONGER A PRIVILEGED SCENIARIO. FROM TUESDAY, THE INCREASE IN THE WESTERLY SHEAR COMBINED WITH AN INTRUSION OF DRY AIR IN THE MID-TROPOSPHERE SHOULD GRADUALLY WEAKEN THE SYSTEM BEFORE A GRADUAL DISSIPATION EXPECTED IN THE MIDDLE OR END OF NEXT WEEK.

IMPACTS ON INHABITED LANDS:

- WITH THE EVACUATION OF THE SYSTEM AT SEA, PERSISTENCE OF SOME RESIDUAL

GUSTS ON SUNDAY ON THE MARITIME BORDER OF NAMPULA PROVINCE (MOZAMBIQUE). THE MOST IMPORTANT GUSTS ARE RAISED AT SEA IN A RATHER RESTRICTED AREA AROUND THE SYSTEM. ACCORDING TO THE PROGRESSION OF THE SYSTEM AT SEA, THE ISLANDS OF THE SOUTH OF THE CHANNEL (BASSAS DA INDIA AND EUROPA) COULD UNDERGO SOME GUSTS OF MODERATE INTENSITY AT THE BEGINNING OF NEXT WEEK OF ABOUT 60 TO 80 KM/H.

- GRADUAL DECREASE IN RAINFALL WITH LIGHT RAINFALL AMOUNTS EXPECTED NEAR THE COAST OF NAMPULA AND ZAMBEZIA PROVINCES. HEAVIEST RAINFALL AMOUNTS ARE BETWEEN 150 AND 300 MM IN 24 HOURS BETWEEN THE COASTS OF MOZAMBIQUE AND MADAGASCAR.

- SEA ROUGH TO LOCALLY VERY ROUGH AT THE END OF THE WEEKEND OFF THE COAST OF MOZAMBIQUE WITH WAVES OF ABOUT 5 TO 6 METERS, GRADUALLY LOWERING FROM TOMORROW SUNDAY. THE SEA CONDITIONS WILL DETERIORATE AT THE BEGINNING OF NEXT WEEK FOR THE ISLANDS OF THE SOUTH OF THE CHANNEL (BASSAS DA INDIA AND EUROPA) FOLLOWING THE MOVEMENT OF THE SYSTEM TO THE SOUTH. WAVES OF 3 TO 4 METERS ON AVERAGE ARE EXPECTED.