

WTIO30 FMEE 201300

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 18/11/20232024

1.A MODERATE TROPICAL STORM 11 (IALY)

2.A POSITION 2024/05/20 AT 1200 UTC:

WITHIN 30 NM RADIUS OF POINT 5.6 S / 43.9 E

(FIVE DECIMAL SIX DEGREES SOUTH AND
FORTY THREE DECIMAL NINE DEGREES EAST)

MOVEMENT: NORTH-WEST 5 KT

3.A DVORAK ANALYSIS: 3.0/3.5/S 0.0/6 H

4.A CENTRAL PRESSURE: 996 HPA

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

RADIUS OF MAXIMUM WINDS (RMW): 28 KM

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

28 KT NE: 55 SE: 100 SW: 205 NW: 195

34 KT NE: 45 SE: 85 SW: 120 NW: 95

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1011 HPA / 400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2024/05/21 00 UTC: 4.1 S / 43.9 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 0 SE: 140 SW: 220 NW: 130

34 KT NE: 0 SE: 0 SW: 130 NW: 65

24H: 2024/05/21 12 UTC: 3.1 S / 44.3 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

28 KT NE: 0 SE: 155 SW: 220 NW: 120

34 KT NE: 0 SE: 0 SW: 130 NW: 75

36H: 2024/05/22 00 UTC: 2.4 S / 44.9 E, VENT MAX= 030 KT, FILLING UP

28 KT NE: 0 SE: 175 SW: 220 NW: 120

48H: 2024/05/22 12 UTC: 1.6 S / 46.4 E, VENT MAX= 025 KT, REMNANT LOW

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=3.0+ CI=3.5-

OVER THE PAST 6 HOURS, BASED ON VISIBLE GEOSTATIONARY IMAGES, IALY HAS REMAINED IN A SHEAR CONFIGURATION, WHILE SUBJECTIVE DVORAK ANALYSIS SHOWS THAT ITS INTENSITY HAS REMAINED STABLE. THE CIMSS OBJECTIVE DPRINT ANALYSIS BASED ON INFRA-RED IMAGES CONFIRMS THE STATIONARY TREND IN INTENSITY, WHILE THE ADT AND AIDT ANALYSES GIVE CONTRADICTORY TRENDS. WITH THESE ELEMENTS, IALY REMAINS A MODERATE TROPICAL STORM WITH MAXIMUM WINDS OF 40KT.

IN TERMS OF TRACK, COMPARED WITH PREVIOUS FORECASTS, IALY IS MAINTAINING A GENERALLY NORTHERLY DIRECTION, THANKS TO THE PRESENCE OF A WEAK RIDGE OF HIGH PRESSURE TO THE WEST OF THE SYSTEM. THE SYSTEM HAS ENTERED A SLOWDOWN PHASE DUE TO THE WEAKENING OF THE AFRICAN RIDGE AND THE SWELLING OF AN EQUATORIAL RIDGE JUST NORTH OF THE METEOR. FROM TOMORROW, AS THE SYSTEM WEAKENS, THE STEERING FLOW WILL BE TAKEN UP BY THE LOWER LAYERS, DOMINATED BY THE TRADE WINDS FLOWING ALONG THE AFRICAN COAST, WHICH SHOULD BEND THE TRACK TO THE NORTHEAST. THE EUROPEAN AND AMERICAN ENSEMBLE FORECASTS SUGGEST A NORTHERLY TRAJECTORY FOR A SYSTEM THAT SHOULD EVOLVE FAR FROM INHABITED LAND.

IN TERMS OF INTENSITY, ENVIRONMENTAL CONDITIONS REMAIN MIXED, WITH DEEP, MODERATE TROPOSPHERIC SHEAR FROM THE NORTHEAST, BUT THESE ARE COUNTERBALANCED BY GOOD UPPER-LEVEL DIVERGENCE WITH TWO EVACUATION CHANNELS ON THE SOUTH AND WEST COASTS, AND STRONG OCEANIC POTENTIAL. THE SYSTEM SHOULD THEREFORE MAINTAIN A STABLE INTENSITY OVER THE NEXT FEW HOURS. THEN OVERNIGHT, THE SHEAR SHOULD BECOME MORE IMPACTFUL, GRADUALLY INJECTING DRY AIR INTO THE SYSTEM, LEADING TO A REGULAR WEAKENING OF THE STRUCTURE FROM TUESDAY MORNING, UNTIL IT DISSIPATES ON TUESDAY NIGHT.

IALY NO LONGER PRESENTS A SIGNIFICANT THREAT TO INHABITED LAND.