

WTIO30 FMEE 051243

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 5/14/20202021

1.A OVERLAND DEPRESSION 14

2.A POSITION 2021/03/05 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 18.0 S / 44.3 E

(EIGHTEEN DECIMAL ZERO DEGREES SOUTH AND
FORTY FOUR DECIMAL THREE DEGREES EAST)

MOVEMENT: EAST-SOUTH-EAST 11 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 1000 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 30 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 295 SE: 0 SW: 0 NW: 295

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/03/06 00 UTC: 19.1 S / 47.4 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

24H: 2021/03/06 12 UTC: 20.8 S / 51.2 E, VENT MAX= 025 KT, TROPICAL DISTURBANCE

36H: 2021/03/07 00 UTC: 22.3 S / 54.1 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

28 KT NE: 295 SE: 230 SW: 165 NW: 260

34 KT NE: 110 SE: 185 SW: 140 NW: 120

48H: 2021/03/07 12 UTC: 23.7 S / 56.4 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 295 SE: 250 SW: 165 NW: 240

34 KT NE: 130 SE: 205 SW: 155 NW: 120

60H: 2021/03/08 00 UTC: 25.3 S / 58.9 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 315 SE: 280 SW: 175 NW: 230

34 KT NE: 150 SE: 220 SW: 165 NW: 120

72H: 2021/03/08 12 UTC: 27.1 S / 61.1 E, VENT MAX= 035 KT, POST-TROPICAL
DEPRESSION

28 KT NE: 335 SE: 295 SW: 195 NW: 220

34 KT NE: 155 SE: 250 SW: 185 NW: 120

2.B LONGER-RANGE OUTLOOK:

96H: 2021/03/09 12 UTC: 30.2 S / 63.2 E, VENT MAX= 025 KT, POST-TROPICAL DEPRESSION

120H: 2021/03/10 12 UTC: 32.3 S / 64.0 E, VENT MAX= 020 KT, FILLING UP

2.C ADDITIONAL INFORMATION:

SATELLITE IMAGERY SUGGESTS THAT THE CENTER OF TROPICAL LOW NUMBER 14 MADE LANDFALL ON THE WEST COAST OF MADAGASCAR BETWEEN 0900 AND 1000UTC ABOUT 30KM NORTH OF MAINTIRANO (MELAKY REGION). BEFORE LANDFALL, THE CLOUD PATTERN REMAINED ASYMMETRICAL AND IN A CURVED BAND CURVING HALF-WAY ROUND, LEAVING THE DVORAK ANALYSIS AT 2.5. DUE TO INERTIA, MAXIMUM WINDS REMAIN ESTIMATED AT 30KT AT 1200UTC, WITH PROBABLY WINDS REACHING VERY LOCALLY 35KT IN THE NORTHEASTERN PERIPHERY OF THE LOW NEAR THE MALAGASY COAST, UNDER THE STRONGEST CONVECTION.

NO NOTABLE CHANGE IN TERMS OF TRACK FORECAST: DURING THE NEXT 18 HOURS, UNDER THE INFLUENCE OF THE NEAR-EQUATORIAL RIDGE, LOW NUMBER 14 WILL MOVE ACROSS THE MALAGASY LANDS LOSING ITS ORGANIZATION. IT WILL EMERGE ON THE EAST COAST ON SATURDAY MORNING AND WILL CONTINUE ITS TRACK TOWARDS THE EAST-SOUTH-EAST BUT THIS TIME MORE UNDER THE INFLUENCE OF THE EXTRATROPICAL DYNAMICS FURTHER SOUTH. THE MAJORITY OF GUIDANCES MAKE THE SYSTEM PASS MORE THAN 100 KM SOUTH-WEST OF REUNION ISLAND IN THE EARLY HOURS OF SUNDAY MORNING, EVEN THOUGH THERE IS STILL SOME UNCERTAINTY ABOUT ITS EXACT TRACK. AT THE BEGINNING OF NEXT WEEK, THE SYSTEM WILL BE TAKEN OVER BY A MID-LATITUDE TROUGH WHICH WILL STEAR IT SOUTH OF 25S, FAR FROM INHABITED AREAS, ON A SOUTH-EAST AND THEN SOUTH-SOUTH-EAST TRACK.

THE SYSTEM SHOULD WEAKEN QUITE QUICKLY OVER MADAGASCAR. WHILE MOVING OUT OVER SEA ON SATURDAY MORNING IT WILL ENCOUNTER A GRADUALLY MORE BAROCLINIC ENVIRONMENT DUE TO THE INTERACTION WITH A BRANCH OF THE SUBTROPICAL JET. AT FIRST, IT SHOULD INTENSIFY AGAIN TO REACH THE TROPICAL STORM STAGE BY SUNDAY, THEN THE INCREASE IN SHEAR BY INTERACTION WITH THE TROUGH FURTHER SOUTH AND ITS CIRCULATION OVER LESS WARM WATERS WILL TEND TO MAKE IT EVOLVE INTO A POST-TROPICAL SYSTEM.

IN TERMS OF IMPACT, FOR MADAGASCAR, WE CAN EXPECT:

-RAINFALL: ACCUMULATIONS OF 100 TO 150 MM ARE POSSIBLE OVER THE CENTRAL WEST OF MADAGASCAR AND FAR INLAND.

-WINDS: GUSTS FROM 80 KM/H TO 90 KM/H ARE POSSIBLE IN THE NORTHERN PERIPHERY OF THE SYSTEM ALONG THE COAST.

FOR MASCARENES:

A RAINY AND WINDY DEGRADATION OF THE WEATHER CONDITIONS, QUITE BRIEF, SHOULD SPREAD TO THE MASCARENES (LA REUNION ESSENTIALLY) ON SATURDAY EVENING TO SUNDAY MORNING OR NOON.

