

WTIO30 FMEE 161253

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 1/6/20212022

1.A ZONE OF DISTURBED WEATHER 6

2.A POSITION 2022/02/16 AT 1200 UTC:

WITHIN 40 NM RADIUS OF POINT 16.9 S / 90.5 E

(SIXTEEN DECIMAL NINE DEGREES SOUTH AND
NINETY DECIMAL FIVE DEGREES EAST)

MOVEMENT: WEST-SOUTH-WEST 6 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 991 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: 665 SE: 850 SW: 720 NW: 665

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1001 HPA / 1100 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/02/17 00 UTC: 19.0 S / 89.1 E, VENT MAX= 035 KT, ZONE OF DISTURBED
WEATHER

28 KT NE: 520 SE: 720 SW: 435 NW: 575

34 KT NE: 280 SE: 295 SW: 175 NW: 230

24H: 2022/02/17 12 UTC: 21.3 S / 87.8 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 610 SE: 770 SW: 490 NW: 545

34 KT NE: 345 SE: 285 SW: 185 NW: 240

36H: 2022/02/18 00 UTC: 24.6 S / 86.4 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 650 SE: 650 SW: 575 NW: 545

34 KT NE: 360 SE: 230 SW: 250 NW: 220

48H: 2022/02/18 12 UTC: 28.1 S / 85.8 E, VENT MAX= 040 KT, POST-TROPICAL
DEPRESSION

28 KT NE: 655 SE: 750 SW: 610 NW: 565

34 KT NE: 360 SE: 295 SW: 280 NW: 230

60H: 2022/02/19 00 UTC: 31.7 S / 86.5 E, VENT MAX= 045 KT, POST-TROPICAL
DEPRESSION

28 KT NE: 740 SE: 760 SW: 685 NW: 640
34 KT NE: 405 SE: 295 SW: 305 NW: 285

72H: 2022/02/19 12 UTC: 35.5 S / 87.8 E, VENT MAX= 045 KT, POST-TROPICAL
DEPRESSION

28 KT NE: 650 SE: 805 SW: 750 NW: 620
34 KT NE: 350 SE: 325 SW: 350 NW: 270

2.B LONGER-RANGE OUTLOOK:

96H: 2022/02/20 12 UTC: 41.8 S / 96.6 E, VENT MAX= 040 KT, EXTRATROPICAL
DEPRESSION

28 KT NE: 685 SE: 640 SW: 780 NW: 405
34 KT NE: 370 SE: 230 SW: 370 NW: 140

2.C ADDITIONAL INFORMATION:

THE LOW PRESSURE AREA FOLLOWED SINCE THE LAST 48H IN THE AUSTRALIAN ZONE HAS GRADUALLY APPROACHED THE 90E (EASTERN LIMIT OF OUR AREA OF RESPONSIBILITY). ITS CURRENT FORWARD MOTION WILL LEAD IT TO CROSS THIS MERIDIAN IN THE NEXT FEW HOURS. THE SYSTEM PRESENTS A MONSOON DEPRESSION STRUCTURE WITH: AN ILL-DEFINED CENTER, A FRAGMENTED AND FLUCTUATING CONVECTION AND STRONG WINDS FAR FROM THE CENTER AND PRESENT MAINLY IN THE EASTERN SEMICIRCLE. THE INTENSITY ANALYSIS OF THESE ATYPICAL STRUCTURES IS BASED ON SCATT PASS (PARTIAL ASCAT PASS THIS MORNING SHOWING AT LEAST 30 KT WINDS FAR FROM THE CENTER). THE LACK OF DEFINITION OF THE CENTER JUSTIFIES THE CLASSIFICATION IN DISTURBED ZONE.

THE SYSTEM IS EVOLVING AT THE NORTHWESTERN EDGE OF A LOW TO MID LEVELS AT SUBTROPICAL RIDGE AND AHEAD OF A DEEP WEAKNESS OF THIS RIDGE IN CONNECTION WITH THE ARRIVAL OF A MID-LAT TROUGH. THE SYSTEM SHOULD RAPIDLY CURVE SOUTHWARDS OVER THE NEXT THREE DAYS TOWARD THE TROUGH AND THEN MERGE WITHIN THE MID-LAT WESTERLIES.

ON THIS TRAJECTORY, THIS SYSTEM HAS LITTLE TIME (24 TO 36H MAX) TO TAKE ADVANTAGE OF FAVORABLE OCEANIC AND ATMOSPHERIC CONDITIONS. GIVEN THE BROAD STRUCTURE OF THE WIND FIELD, A MODEST INTENSIFICATION IS ENVISAGED ASSOCIATED WITH A MODERATE PROBABILITY THAT THE STRUCTURE WILL EVOLVE TOWARDS A MORE CLASSIC CONFIGURATION. FROM FRIDAY ONWARDS, THE ENVIRONMENTAL CONDITIONS DETERIORATE AS WE APPROACH 30S AND BECOME CONDUCIVE TO THE BEGINNING OF AN EXTRA-TROPICAL TRANSITION.

THIS SYSTEM WILL REMAIN FAR FROM ANY INHABITED LAND.

NEXT ADVISORY ON THIS SYSTEM AT 00 UTC TOMORROW MORNING (IRREGULAR MONITORING).