

WTIO30 FMEE 040029

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

0.A WARNING NUMBER: 3/4/20162017

1.A TROPICAL DISTURBANCE 4

2.A POSITION 2017/02/04 AT 0000 UTC:

WITHIN 25 NM RADIUS OF POINT 14.9 S / 56.7 E

(FOURTEEN DECIMAL NINE DEGREES SOUTH AND FIFTY SIX DECIMAL SEVEN DEGREES EAST)

MOVEMENT : SOUTH-EAST 6 KT

3.A DVORAK ANALYSIS: 2.0/2.0/D 1.0/12 H

4.A CENTRAL PRESSURE: 1004 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 25 KT

RADIUS OF MAXIMUM WINDS (RMW) :37 KM

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2017/02/04 12 UTC: 15.9 S / 57.0 E, MAX WIND=025 KT, TROPICAL DISTURBANCE

24H: 2017/02/05 00 UTC: 16.8 S / 57.2 E, MAX WIND=030 KT, TROPICAL DEPRESSION

36H: 2017/02/05 12 UTC: 17.1 S / 57.3 E, MAX WIND=035 KT, MODERATE TROPICAL STORM

48H: 2017/02/06 00 UTC: 17.8 S / 57.5 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

60H: 2017/02/06 12 UTC: 18.4 S / 57.3 E, MAX WIND=045 KT, MODERATE TROPICAL STORM

72H: 2017/02/07 00 UTC: 19.8 S / 56.6 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK :

96H: 2017/02/08 00 UTC: 22.1 S / 53.0 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

120H: 2017/02/09 00 UTC: 23.5 S / 50.5 E, MAX WIND=065 KT, TROPICAL CYCLONE

2.C ADDITIONAL INFORMATION:

T=CI=2.0

OVER THE LAST 6 HOURS, CONVECTION BEGAN TO WRAP AROUND THE CIRCULATION CENTER. UPPER DIVERGENCE REMAINS STRONG, BOTH ON THE POLAR AND THE EQUATORIAL SIDES. 2244Z MW SSMI SWATH SHOW A CLEAR IMPROVEMENT OF THE MID-TROPOSPHERIC ORGANISATION.

TODAY, THE TRACK IS EXPECTED TO BEND SOUTH-SOUTH-EASTWARDS, STEERED BY THE MID-TROPOSPHERIC RIDGE IN ITS NORTH-EAST. TOMORROW, THE RIDGE IS WEAKENING AND THE SYSTEM SHOULD SLOW DOWN DUE TO THE LACK OF A WELL DEFINED STERRING FLOW. FROM MONDAY, WITH THE ARRIVAL OF A NEW RIDGE IN THE SOUTH AND THE APPEARANCE OF HIGH GEOPOTENTIALS OVER THE CENTER OF THE BASIN, THE SYSTEM SHOULD GRADUALLY ACCELERATE TOWARDS THE SOUTH-WEST. THE AVAILABLE GUIDANCE IS IN RATHER GOOD AGREEMENT ON THIS TRACK FORECAST. THE TIMING IS STILL UNCERTAIN BUT 12Z MODELS ARE IN BETTER AGREEMENT, WITH THE ECMWF MODEL SLOWING DOWN.

ENVIRONMENTAL CONDITIONS WILL REMAIN CONDUCIVE FOR FURTHER DEVELOPEMENT. SUNDAY, WITH THE BUILDING OF AN OUTFLOW CHANNEL IN THE SOUTH-EASTERN QUADRANT AND THE GRADUAL INCREASE OF THE LOW LEVEL POLAR CONVERGENCE, THE MINIMUM IS EXPECTED TO INTENSIFY AND REACH THE MODERATE TROPICAL STORM STAGE. TUESDAY, WITH THE CHANGE IN THE TRACK COURSE, THE SYSTEM MAY UNDERGO A MODERATE NORTH-WESTERLY WINDSHEAR. THIS CONSTRAINT IS FORECAST TO SLOW THE DEEPENING.

A DEGRADATION OF THE WEATHER IS EXPECTED WITH THE PASSAGE OF THIS SYSTEM NEAR THE MASCARENES ISLANDS.