

Direction Interrégionale pour l'Océan Indien 50, Boulevard du Chaudron 97490 Sainte-Clotilde Tél : 0262 92 11 00 Fax Exploitation : 0262 92 11 48 Fax Direction : 0262 92 11 47



WTIO30 FMEE 160625

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

0.A WARNING NUMBER: 4/6/20152016

1.A SEVERE TROPICAL STORM 6 (EMERAUDE)

# 2.A POSITION 2016/03/16 AT 0600 UTC:

WITHIN 21 NM RADIUS OF POINT 10.8 S / 85.0 E

(TEN DECIMAL EIGHT DEGREES SOUTH AND EIGHTY FIVE DECIMAL ZERO DEGREES

EAST)

**MOVEMENT: WEST-NORTH-WEST 5 KT** 

3.A DVORAK ANALYSIS: 4.0/4.0/D 0.5/6 H

4.A CENTRAL PRESSURE: 989 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 55 KT RADIUS OF MAXIMUM WINDS (RMW) :28 KM

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

28 KT NE: 130 SE: 170 SW: 150 NW: 130 34 KT NE: 100 SE: 120 SW: 110 NW: 100 48 KT NE: 60 SE: 60 SW: 60 NW: 60

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 400 KM 8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

## 1.B FORECASTS:

12H: 2016/03/16 18 UTC: 10.5 S / 85.3 E, MAX WIND=065 KT, TROPICAL CYCLONE 24H: 2016/03/17 06 UTC: 10.5 S / 85.7 E, MAX WIND=075 KT, TROPICAL CYCLONE 36H: 2016/03/17 18 UTC: 10.9 S / 86.1 E, MAX WIND=085 KT, TROPICAL CYCLONE 48H: 2016/03/18 06 UTC: 11.5 S / 87.2 E, MAX WIND=100 KT, INTENSE TROPICAL CYCLONE

60H: 2016/03/18 18 UTC: 12.1 S / 89.0 E, MAX WIND=090 KT, INTENSE TROPICAL CYCLONE

72H: 2016/03/19 06 UTC: 12.9 S / 90.1 E, MAX WIND=085 KT, TROPICAL CYCLONE

### 2.B LONGER-RANGE OUTLOOK:

96H: 2016/03/20 06 UTC: 14.2 S / 91.2 E, MAX WIND=075 KT, TROPICAL CYCLONE 120H: 2016/03/21 06 UTC: 15.8 S / 90.3 E, MAX WIND=065 KT, TROPICAL CYCLONE

### 2.C ADDITIONAL INFORMATION:

T=CI=4.0-

THE SYSTEM CONTINUES ITS RAPID INTENSIFICATION WITHIN OCEANIC AND ATMOSPHERIC FAVOURABLE ENVIRONMENTAL CONDITIONS. DURING THE LAST 6

HOURS, DEEP CONVECTION REMAINED NEAR THE CENTER. 85GHZ MICROWAVES IMAGES OF 0033Z AND 0351Z, AND VISIBLE IMAGERY SUGGEST AN IMPROVEMENT OF THE PATTERN, WITH A BETTER DEFINED EYE. HOWEVER, ON THE LAST INFRARED IMAGES, A SLIGHT DETERIORATION OF THE CLOUD STRUCTURE, WITH THE DISAPPEARANCE OF WARM SPOT. THE COMPACT SYSTEM, BENEFITS FROM A GOOD UPPER LEVEL DIVERGENCE ESPECIALLY ON THE POLAR SIDE.

EMERAUDE TRACK IS STILL BENDING NORTHWESTWARD. THE SYSTEM SHOULD ORIENTATE ITS TRACK PROGRESSIVELY EASTWARD UNDER THE STEERING FLOW OF A NEAR EQUATORIAL RIDGE BUILDING IN ITS NORTH-EAST. FROM FRIDAY, GLOBAL MODELS ARE NOT IN AGREEMENT ON ITS EVOLUTION DUE TO THE PRESENCE OF SEVERAL POTENTIAL STEERING FLOW. THE CURRENT FORECAST IS BASED ON A MEAN TRACK BETWEEN THE MAIN NUMERICALS MODELS, ESPECIALLY ON GFS, WHICH IS INTERMEDIATE BETWEEN UKMO AND THE EURO.

ON THIS TRAJECTORY, ENVIRONMENTAL CONDITIONS WILL REMAIN MOSTLY CONDUCIVE DURING THE FORECAST PERIOD. FRIDAY, AN INCREASE OF THE NORTH-NORTH-EASTERLY SHEAR MAY LIMIT THE INTENSITY OF THE SYSTEM. GIVEN THE SMALL SIZE OF THE SYSTEM, RAPID VARIATION (INCLUDING RAPID INTENSIFICATION AND RAPID DECAY) ARE LIKELY BRINGING UNCERTAINTIES IN THE INTENSITY FORECAST.