

WTIO30 FMEE 180110

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

0.A WARNING NUMBER: 16/7/20172018

1.A MODERATE TROPICAL STORM 7 (ELIAKIM)

2.A POSITION 2018/03/18 AT 0000 UTC:

WITHIN 40 NM RADIUS OF POINT 18.5 S / 49.4 E

(EIGHTEEN DECIMAL FIVE DEGREES SOUTH AND FORTY NINE DECIMAL FOUR  
DEGREES EAST)

MOVEMENT : SOUTH-SOUTH-WEST 9 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 995 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 35 KT

RADIUS OF MAXIMUM WINDS (RMW) :NIL

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

28 KT NE: 240 SE: 460 SW: 0 NW: 0

34 KT NE: 0 SE: 220 SW: 0 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 800 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : MEDIUM

1.B FORECASTS:

12H: 2018/03/18 12 UTC: 20.5 S / 49.3 E, MAX WIND=035 KT, MODERATE TROPICAL  
STORM

24H: 2018/03/19 00 UTC: 22.3 S / 49.8 E, MAX WIND=040 KT, MODERATE TROPICAL  
STORM

36H: 2018/03/19 12 UTC: 24.6 S / 50.6 E, MAX WIND=040 KT, MODERATE TROPICAL  
STORM

48H: 2018/03/20 00 UTC: 26.6 S / 51.7 E, MAX WIND=040 KT, MODERATE TROPICAL  
STORM

60H: 2018/03/20 12 UTC: 29.2 S / 53.3 E, MAX WIND=045 KT, POST-TROPICAL  
DEPRESSION

72H: 2018/03/21 00 UTC: 31.9 S / 54.8 E, MAX WIND=045 KT, POST-TROPICAL  
DEPRESSION

2.B LONGER-RANGE OUTLOOK :

96H: 2018/03/22 00 UTC: 36.7 S / 58.0 E, MAX WIND=045 KT, POST-TROPICAL  
DEPRESSION

120H: 2018/03/23 00 UTC: 43.1 S / 63.6 E, MAX WIND=045 KT, EXTRATROPICAL

## DEPRESSION

### 2.C ADDITIONAL INFORMATION:

ELIAKIM HAS BEEN TRACKED TONIGHT WITH SURFACE OBS FROM SAINTE-MARIE AND TAMATAVE. AT THIS LOCATION, LIGHT WINDS HAVE PREVAILED MOST OF THE NIGHT WITH A GRADUAL SHIFT FROM SOUTHERLY TO NORTHERLY WINDS. AT 00Z, CORRECTED FROM BAROMETRIC TIDE PRESSURE IS NEAR 995 HPA, SUGGESTING THAT THE CENTER HAS PASSED OVER THE CITY. SINCE THE SYSTEM IS BACK OVER THE EASTERN COASTLINES YESTERDAY EVENING, IT SEEMS THAT IT MOVES OVER THE SHORELINE ON A GENERAL SOUTHWARDS TRACK. GIVEN THE ILL-DEFINED CENTER, POSITION CONFIDENCE REMAINS FAIR.

THE INTENSITY ESTIMATES REMAINS THE SAME AS SURFACE PRESSURE OBS DO NOT SHOW ANY FILL-UP TENDENCY. A BAND OF DEEP CONVECTION, FORMED JUST BEFORE 18Z, WRAPPED NOW  $0.3^\circ$  ON LOG10 SPIRAL OVER THE SOUTHERN PART OF THE CIRCULATION. DUE TO LAND INTERACTION, THE SATELLITE SIGNATURE IS STILL NOT REPRESENTATIVE OF THE CURRENT INTENSITY.

NO MAJOR CHANGE TO THE GENERAL REASONING . ELIAKIM IS EXPECTED TO MOVE ALONG THE WESTERN AND THEN SOUTH-WESTERN EDGE OF A MID-LEVEL RIDGE BEFORE ENTERING WITHIN THE MID-LAT WESTERLIES LATER THIS WEEK.

THE STRUCTURE OF ELIAKIM HAS BEEN HIGHLY IMPACTED BY LAND INTERACTION. MOREOVER THE SYSTEM IS EXPECTED TO MOVE VERY CLOSE TO THE SHORE OVER THE NEXT 18 HOURS TO TAKE ADVANTAGE FROM THE STILL FAVORABLE SHEAR AND UPPER LEVEL DIVERGENCE CONDITIONS. SUNDAY EVENING AND THEN MONDAY, THE STRENGTHENING OF A NORTH-WESTERLY SHEAR AHEAD OF AN UPPER LEVEL TROUGH SHOULD WILL DEFINITELY END THE FAVORABLE ENVIRONMENTAL CONDITIONS AROUND THE SYSTEM. FROM TUESDAY AND BEYOND, ELIAKIM SHOULD BEGIN ITS EXTRATROPICALISATION UNDER A GROWING BAROCLINIC INFLUENCE.

HEAVY RAINFALLS ARE STILL THE MAIN HAZARDS FROM ELIAKIM. THIS HEAVY RAINFALLS ARE CURRENTLY SPREADING OVER NORTH-WESTERN MADAGASCAR IN CONJUNCTION WITH THE MONSOON FLOW AND ALONG THE CENTRAL EAST COAST SOUTH OF THE CENTER.