

WTIO30 FMEE 151243

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

0.A WARNING NUMBER: 6/7/20172018

1.A MODERATE TROPICAL STORM 7 (ELIAKIM)

2.A POSITION 2018/03/15 AT 1200 UTC:

WITHIN 25 NM RADIUS OF POINT 15.6 S / 53.0 E

(FIFTEEN DECIMAL SIX DEGREES SOUTH AND FIFTY THREE DECIMAL ZERO  
DEGREES EAST)

MOVEMENT : WEST-SOUTH-WEST 10 KT

3.A DVORAK ANALYSIS: 3.0/3.0/D 0.5/12 H

4.A CENTRAL PRESSURE: 986 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 45 KT

RADIUS OF MAXIMUM WINDS (RMW) :74 KM

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

28 KT NE: 320 SE: 460 SW: 370 NW: 320

34 KT NE: 240 SE: 280 SW: 240 NW: 90

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 800 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : MEDIUM

1.B FORECASTS:

12H: 2018/03/16 00 UTC: 15.9 S / 50.9 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

24H: 2018/03/16 12 UTC: 16.0 S / 49.9 E, MAX WIND=065 KT, TROPICAL CYCLONE

36H: 2018/03/17 00 UTC: 16.1 S / 49.0 E, MAX WIND=055 KT, OVERLAND DEPRESSION

48H: 2018/03/17 12 UTC: 16.9 S / 48.5 E, MAX WIND=045 KT, OVERLAND DEPRESSION

60H: 2018/03/18 00 UTC: 18.2 S / 48.8 E, MAX WIND=040 KT, OVERLAND DEPRESSION

72H: 2018/03/18 12 UTC: 19.8 S / 49.3 E, MAX WIND=035 KT, MODERATE TROPICAL  
STORM

2.B LONGER-RANGE OUTLOOK :

96H: 2018/03/19 12 UTC: 24.3 S / 50.8 E, MAX WIND=035 KT, MODERATE TROPICAL  
STORM

120H: 2018/03/20 12 UTC: 28.4 S / 54.0 E, MAX WIND=035 KT, POST-TROPICAL  
DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=3.0

OVER THE LAST 6 HOURS, THE CLOUD PATTERN DID NOT EVOLVE MUCH. THE CLOUD TOPS SLIGHTLY WARMED BUT THE CONVECTION CONTINUES TO WRAP AROUND THE CENTER. CIRRUS CLOUDS STILL MATERIALIZE THE STRONG UPPER DIVERGENCE OVER ELIAKIM, WITH BOTH POLEWARD AND EQUATORWARD EVACUATION CHANNELS.

NO SIGNIFICANT EVOLUTION IN THE TRACK FORECAST, ELIAKIM REMAINS STEERED BY A MID-LEVEL RIDGE IN THE SOUTH-EAST AND CONTINUES TO TRACK WEST-SOUTH-WESTWARD UNTIL ITS LANDING ON MADAGASCAR FRIDAY IN THE REGION OF THE MASOALA PENINSULA AND STE MARIE ISLAND. DURING ITS PASSAGE OVER LAND, ELIAKIM SHOULD TURN SOUTH-EASTWARD AS THE RIDGE GRADUALLY SHIFTS EASTWARD AND A MID-LATITUDES TROUGH ARRIVES FROM THE SOUTH-WEST. SUNDAY, THE WEAKENED SYSTEM SHOULD COME BACK OVER SEA AND CONTINUE TO TRACK GENERALLY SOUTH-EASTWARD. THE AVAILABLE GUIDANCE REMAIN IN RATHER GOOD AGREEMENT OVER THIS SCENARIO, EVEN IF THE LOCALISATION AND TIMING OF THE RETURN OVER SEA REMAIN RELATIVELY UNCERTAIN.

THE ENVIRONMENT IS CONDUCIVE FOR FURTHER INTENSIFICATION OF THE SYSTEM UNTIL ITS LANDING ON THE MALAGASY NORTH-EASTERN COASTS FRIDAY, THANKS TO A GREAT UPPER DIVERGENCE. HOWEVER THE WIDE INNER CORE STRUCTURE SHOULD PREVENT A RAPID DEEPENING. THE SYSTEM COULD REACH THE MINIMAL TROPICAL CYCLONE STAGE JUST BEFORE LANDING. ONCE OVERLAND, THE SYSTEM WILL WEAKEN. SUNDAY EVENING, AS ELIAKIM SHOULD HAVE JUST CAME BACK OVER SEA, THE STRENGTHENING OF A NORTH-WESTERLY SHEAR AHEAD OF AN UPPER TROUGH SHOULD STRONGLY LIMIT ITS RE-INTENSIFICATION. TUESDAY, ELIAKIM MAY BEGIN ITS EXTRATROPICALISATION UNDER A GROWING BAROCLINIC INFLUENCE.

THE FIRST PERIPHERAL BANDS OF ELIAKIM ARE CURRENTLY REACHING THE NORTH-EASTERN MALAGASY COASTS. THE WEATHER CONDITIONS WILL CONTINUE TO WORSEN, AND WILL BECOME PARTICULARLY DANGEROUS FRIDAY DURING ITS LANDING. THE STORM SURGE COULD REACH 2M IN THE BOTTOM OF ANTONGIL BAY NEAR MAROANTSETRA. BEWARE THAT THIS VALUE DOES NOT TAKE INTO ACCOUNT THE TIDE NOR THE WAVE SET-UP.