

WTIO30 FMEE 160030

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

0.A WARNING NUMBER: 8/7/20172018

1.A SEVERE TROPICAL STORM 7 (ELIAKIM)

2.A POSITION 2018/03/16 AT 0000 UTC:

WITHIN 25 NM RADIUS OF POINT 15.9 S / 50.9 E

(FIFTEEN DECIMAL NINE DEGREES SOUTH AND FIFTY DECIMAL NINE DEGREES EAST)

MOVEMENT : WEST 10 KT

3.A DVORAK ANALYSIS: 4.0/4.0/D 1.0/12 H

4.A CENTRAL PRESSURE: 980 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 55 KT

RADIUS OF MAXIMUM WINDS (RMW) :74 KM

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

28 KT NE: 410 SE: 410 SW: 330 NW: 330

34 KT NE: 280 SE: 240 SW: 220 NW: 240

48 KT NE: 130 SE: 130 SW: 130 NW: 130

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 1000 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/03/16 12 UTC: 16.2 S / 49.6 E, MAX WIND=065 KT, TROPICAL CYCLONE

24H: 2018/03/17 00 UTC: 16.5 S / 48.3 E, MAX WIND=045 KT, OVERLAND DEPRESSION

36H: 2018/03/17 12 UTC: 17.3 S / 47.5 E, MAX WIND=040 KT, OVERLAND DEPRESSION

48H: 2018/03/18 00 UTC: 19.0 S / 48.0 E, MAX WIND=040 KT, OVERLAND DEPRESSION

60H: 2018/03/18 12 UTC: 20.4 S / 48.7 E, MAX WIND=045 KT, MODERATE TROPICAL STORM

72H: 2018/03/19 00 UTC: 22.4 S / 49.2 E, MAX WIND=045 KT, MODERATE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK :

96H: 2018/03/20 00 UTC: 26.5 S / 51.7 E, MAX WIND=040 KT, POST-TROPICAL DEPRESSION

120H: 2018/03/21 00 UTC: 31.3 S / 53.8 E, MAX WIND=040 KT, POST-TROPICAL DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=4.0

OVER THE LAST SIX HOURS, CLOUD PATTERN IMPROVED SIGNIFICANTLY, WITH CURRENTLY, DEEP CONVECTION ALL AROUND THE CENTER. ON THE LATEST IMAGES, THE CORE IS EVEN EMBEDDED. MICROWAVE IMAGERY (SSMI 2248Z) CONFIRMS A CLEAR CONSOLIDATION OF THE INNER CIRCULATION ESPECIALLY IN LOW LEVELS. DEEPENING KEEPS ON GOING AS THE WESTERN WALL REACH MASOALA PENINSULA.

FOR 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 TODAY BETWEEN MASOALA PENINSULA AND STE MARIE ISLAND. ON SATURDAY, ELIAKIM SHOULD EVOLVE OVERLAND, THE FORECAST POSITIONS ARE THEREFORE UNCERTAIN DUE TO THE POTENTIAL DISAPPEARING OF THE LOW LEVEL CIRCULATION. SUNDAY, THE WEAKENED SYSTEM SHOULD COME BACK OVER SEA AND TRACK GENERALLY SOUTH-EASTWARD, STEERED BY THE RIDGE AT EAST AND THE ARRIVING UPPER TROUGH IN THE SOUTH-WEST. THE AVAILABLE GUIDANCE REMAINS 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 UP TO ITS LANDING ON THE MALAGASY NORTH-EASTERN COASTS TODAY, THANKS TO A GREAT UPPER DIVERGENCE. THE SYSTEM COULD BE 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 THE CHANCES FOR RE-INTENSIFICATION. AT LONG RANGE, ELIAKIM MAY BEGIN ITS EXTRATROPICALISATION UNDER A GROWING BAROCLINIC INFLUENCE.

ELIAKIM IS A THREATENING SYSTEM AND WEATHER CONDITIONS WILL CONTINUE TO WORSEN NEAR ANTONGIL BAY AND SAINTE MARIE ISLAND. THE STORM SURGE COULD REACH 1M ON THE COAST AND LOCALLY 2M NEAR MAROANTSETRA. BEWARE THAT THIS VALUE DOES NOT TAKE INTO ACCOUNT THE TIDE NOR THE WAVE SET-UP.