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WTIO30 FMEE 171221

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

0.A WARNING NUMBER: 12/5/20152016

1.A INTENSE TROPICAL CYCLONE 5 (URIAH)

### 2.A POSITION 2016/02/17 AT 1200 UTC:

WITHIN 10 NM RADIUS OF POINT 18.7 S / 80.1 E

(EIGHTEEN DECIMAL SEVEN DEGREES SOUTH AND EIGHTY DECIMAL ONE DEGREES

EAST)

MOVEMENT: WEST-SOUTH-WEST 10 KT

3.A DVORAK ANALYSIS: 6.0/6.0/D 1.5/12 H

4.A CENTRAL PRESSURE: 935 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 105 KT RADIUS OF MAXIMUM WINDS (RMW) :33 KM

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

28 KT NE: 300 SE: 460 SW: 650 NW: 280 34 KT NE: 200 SE: 310 SW: 350 NW: 170 48 KT NE: 130 SE: 190 SW: 200 NW: 110 64 KT NE: 90 SE: 120 SW: 130 NW: 90

# 7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1004 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

### 1.B FORECASTS:

12H: 2016/02/18 00 UTC: 20.0 S / 78.7 E, MAX WIND=110 KT, INTENSE TROPICAL CYCLONE

24H: 2016/02/18 12 UTC: 21.3 S / 78.1 E, MAX WIND=100 KT, INTENSE TROPICAL CYCLONE

36H: 2016/02/19 00 UTC: 22.2 S / 78.3 E, MAX WIND=090 KT, INTENSE TROPICAL CYCLONE

48H: 2016/02/19 12 UTC: 22.7 S / 78.6 E, MAX WIND=085 KT, TROPICAL CYCLONE 60H: 2016/02/20 00 UTC: 23.0 S / 78.5 E, MAX WIND=075 KT, TROPICAL CYCLONE 72H: 2016/02/20 12 UTC: 23.3 S / 78.3 E, MAX WIND=065 KT, TROPICAL CYCLONE

### 2.B LONGER-RANGE OUTLOOK:

96H: 2016/02/21 12 UTC: 24.7 S / 79.0 E, MAX WIND=045 KT, MODERATE TROPICAL STORM

120H: 2016/02/22 12 UTC: 28.0 S / 80.8 E, MAX WIND=040 KT, POST-TROPICAL DEPRESSION

#### 2.C ADDITIONAL INFORMATION:

T=6.0+ CI=6.0+

OVER THE LAST 6 HOURS, URIAH HAS CONTINUED TO INTENSIFY RAPIDLY, WITH A WARMER EYE AND A COLDER AND MORE SYMMETRIC CDO. CONVECTIVE ACTIVITY ESPECIALLY INCREASE IN THE SOUTHERN PARTS. ACCORDING TO CIMSS DATA, VERTICAL WINDSHEAR IS STRONGER (12KT) BUT WITH NO EFFECT ON THE SYSTEM HEART FOR NOW.

TONIGHT, WITH THE REBUILDING OF A MID-LEVEL RIDGE IN THE EAST, THE SYSTEM WILL CONTINUE TO BEND SOUTHWARD. FRIDAY, URIAH IS LIKELY TO SLOW DOWN BECAUSE OF THE BUILDING OF A MID LEVEL RIDGE IN THE SOUTH. MODEL GUIDANCE STILL SHOW LARGE SPREAD FROM FRIDAY EVENING, SUGGESTING AN INCREASED UNCERTAINTY. HOWEVER, THE MAJORITY OF THE ENSEMBLE MEMBERS AND THE OTHER NWP MODELS FORECAST A COMEBACK TO A SOUTHEASTWARD TRACK STEERED BY A BUILDING RIDGE IN ITS NORTHEAST AND A LOW LEVEL TROUGH.

ON THIS TRACK, URIAH IS UNLIKELY TO EXCEED THE INTENSE TROPICAL CYCLONE INTENSITY, AS ITS MAXIMAL POTENTIAL INTENSITY (MPI) IS ESTIMATED AT 110KT. OVERNIGHT, IT WILL LEAVE THESE WATERS RESPONSIBLE FOR ITS DEEPENING, LEADING TO A SLOW FILLING. UPPER LEVELS CONDITIONS SHOULD BECOME PROGRESSIVELY LESS CONDUCIVE WITH THE INCREASE OF THE NORTHWESTERLY VWS, ESPECIALLY ON SATURDAY WITH THE ARRIVAL OF AN UPPER TROUGH. THEN THE OCEAN HEAT CONTENT SHOULD BE MARGINAL SOUTH OF 23-24S, LEADING TO A SIGNIFICANT FILING. MOREOVER, THE SLOW MOTION FORECAST FROM FRIDAY MAY PARTICIPATE IN THE COOLING OF THE UNDERLYING SST.