

WTIO30 FMEE 231230

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 15/16/20202021

1.A MODERATE TROPICAL STORM 16 (JOBO)

2.A POSITION 2021/04/23 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 8.9 S / 43.8 E

(EIGHT DECIMAL NINE DEGREES SOUTH AND
FORTY THREE DECIMAL EIGHT DEGREES EAST)

MOVEMENT: WEST-NORTH-WEST 3 KT

3.A DVORAK ANALYSIS: 3.5/3.5/D 0.5/6 H

4.A CENTRAL PRESSURE: 997 HPA

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

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 20 SE: 95 SW: 185 NW: 20

34 KT NE: 0 SE: 35 SW: 55 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/04/24 00 UTC: 8.4 S / 42.8 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 45 SE: 175 SW: 220 NW: 75

34 KT NE: 20 SE: 35 SW: 35 NW: 20

24H: 2021/04/24 12 UTC: 7.9 S / 41.7 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

28 KT NE: 35 SE: 35 SW: 100 NW: 100

36H: 2021/04/25 00 UTC: 7.5 S / 40.6 E, VENT MAX= 025 KT, TROPICAL DISTURBANCE

48H: 2021/04/25 12 UTC: 7.2 S / 39.5 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

60H: 2021/04/26 00 UTC: 6.7 S / 38.2 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=3.5-

DURING THE LAST 6 HOURS, THE CURVED BAND PATTERN HAS EVOLVED INTO A CDO PATTERN WITH SLIGHTLY WARMER CONVECTIVE TOPS. THE LOCATION OF THE CENTER IS NOT EASY EITHER WITH THE LAST MICROWAVE DATA (ESPECIALLY WITH AMSR2 OF 1022UTC) OR THE LAST ASCAT DATA OF 0700UTC. THE SMALL SIZE OF THE SYSTEM SUGGESTS A LARGE UNCERTAINTY IN THE DETERMINATION OF THE ASCAT WINDS, AS WELL AS AN UNDERESTIMATION. WE CAN THEN ESTIMATE WINDS OF 45KT MAINLY IN THE SOUTH SECTOR, UNDER THE MAIN CONVECTIVE MASS.

JOBO SLOWS DOWN SLIGHTLY BUT CONTINUES ITS TRACK TOWARDS WEST-NORTHWEST, UNDER THE EFFECT OF THE MID-TROPOSPHERE RIDGE LOCATED OVER THE CENTER OF THE MOZAMBIQUE CHANNEL AND THE LOW LEVEL FLOW OVER THE NORTHERN PART OF THE CHANNEL. THE DISPERSION BETWEEN THE DIFFERENT GUIDANCES REMAINS WEAK IN DIRECTION BUT THE MODELS SEEM A QUITE FAST. THE PRESENT RSMC FORECAST HAS TAKEN INTO ACCOUNT THIS SLOWDOWN. JOBO IS CURRENTLY CIRCULATING NORTH OF THE GREAT COMOROS ARCHIPELAGO, AT ABOUT 250KM AND WILL CONTINUE ITS TRACK TOWARDS TANZANIA WHICH IT WILL REACH ON SUNDAY. DUE TO THE SLOWDOWN, IT WILL LAND NEAR DAR ES SALAM ON SUNDAY DURING THE DAY.

AT THE MOMENT, THE UPPER SHEAR IS NOT VERY MARKED AND IT IS MAINLY A MEDIUM TROPO WESTERLY SHEAR WHICH SEEMS TO LIMIT A MORE FRANK INTENSIFICATION PHASE. A SCENARIO OF A SHORT INTENSIFICATION WINDOW WHICH COULD BE RAPID BECAUSE OF THE SMALL SIZE OF THE SYSTEM IS STILL POSSIBLE. HOWEVER, THE RSMC DOES NOT FOLLOW THIS HYPOTHESIS AND REMAINS ON A TEMPORARY MAINTENANCE OF THE INTENSITY AT THE MAXIMUM THRESHOLD OF MODERATE TROPICAL STORM. THEREAFTER, THE SHEAR STRENGTHENS BY ORIENTING ITSELF A LITTLE MORE WEST-SOUTH-WEST THEN SOUTH-WEST IN THE MIDDLE TROPOSPHERE CONTRIBUTING TO THE WEAKENING OF THE SYSTEM BEFORE ITS LANDING. THE SMALL SIZE OF JOBO INDUCES HOWEVER A LARGER THAN AVERAGE UNCERTAINTY ON THE INTENSITY PREDICTION. IT CAN UNDERGO RAPID INTENSITY VARIATIONS.

IN TERMS OF EXPECTED IMPACTS, HEAVY RAINS ARE STILL TO BE EXPECTED ON THE ISLANDS OF THE COMOROS ARCHIPELAGO IN THE MARGIN OF THE STORM THAT CAN REACH 100 TO 200MM IN 24H, UNTIL TOMORROW SATURDAY. THE GUSTS SHOULD REMAIN MODEST OF ABOUT 60 KM/H. FOR TANZANIA, WITH THE WEAKENING OF THE JOBO SYSTEM AT THE LANDING, THE IMPACTS COULD REMAIN LIMITED IN TERMS OF WIND BUT HEAVY RAINS ARE EXPECTED AT THE LANDING ZONE. FROM SUNDAY, WE CAN EXPECT TO HAVE ACCUMULATIONS THAT CAN REACH 250/300M IN 24H, THAT IS TO SAY QUANTITIES EQUIVALENT TO THE MONTHLY ACCUMULATION FOR A MONTH OF APRIL.