

WTIO30 FMEE 020618

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 2/11/20192020

1.A MODERATE TROPICAL STORM 11 (IRONDRO)

2.A POSITION 2020/04/02 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 12.5 S / 69.8 E

(TWELVE DECIMAL FIVE DEGREES SOUTH AND
SIXTY NINE DECIMAL EIGHT DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-EAST 5 KT

3.A DVORAK ANALYSIS: 2.5/2.5/D 1.0/18 H

4.A CENTRAL PRESSURE: 998 HPA

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

RADIUS OF MAXIMUM WINDS (RMW): 56 KM

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

28 KT NE: 280 SE: SW: 260 NW: 480

34 KT NE: 200 SE: SW: 130 NW: 150

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2020/04/02 18 UTC: 14.1 S / 71.3 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

24H: 2020/04/03 06 UTC: 16.1 S / 73.6 E, VENT MAX= 065 KT, TROPICAL CYCLONE

36H: 2020/04/03 18 UTC: 18.0 S / 76.0 E, VENT MAX= 080 KT, TROPICAL CYCLONE

48H: 2020/04/04 06 UTC: 19.5 S / 78.3 E, VENT MAX= 080 KT, TROPICAL CYCLONE

60H: 2020/04/04 18 UTC: 20.9 S / 81.0 E, VENT MAX= 070 KT, TROPICAL CYCLONE

72H: 2020/04/05 06 UTC: 21.9 S / 83.2 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK:

96H: 2020/04/06 06 UTC: 24.3 S / 87.3 E, VENT MAX= 040 KT, POST-TROPICAL
DEPRESSION

120H: 2020/04/07 06 UTC: 26.5 S / 93.1 E, VENT MAX= 035 KT, POST-TROPICAL
DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=2.5+

DURING THE PREVIOUS NIGHT, DEEP CONVECTION REMAINED VERY STRONG,
PARTICULARLY IN THE WESTERN SECTOR OF THE SYSTEM. SINCE THIS MORNING, A
CURVED BAND REACHING A HALF-TURN IS DEVELOPING IN THE SAME SECTOR

AROUND A CENTER THAT APPEARS WELL DEFINED ON GEOSTATIONARY IMAGERY. THE LATEST ASCAT DATA SHOWS THAT GALE FORCE WIND IS PRESENT IN THE NORTHWEST QUADRANT OF THE CIRCULATION. ALSO, THE SYSTEM HAS BEEN NAMED AT 06Z BY THE MAURITIUS METEOROLOGICAL SERVICE.

ENVIRONMENTAL CONDITIONS ARE FAVOURABLE TO INTENSIFYING THE SYSTEM WITH A SUSTAINED PACE. AT UPPER LEVEL, DIVERGENCE IS EXCELLENT ON BOTH POLAR AND EQUATORIAL SIDE. THE VERTICAL SHEAR IS LOW AND THE OCEANIC POTENTIAL IS IMPORTANT. FROM SATURDAY, THE ENVIRONMENT SHOULD RAPIDLY DETERIORATE WITH THE STRENGTHENING OF THE NORTHWESTERLY VERTICAL WIND SHEAR, AHEAD OF AN UPPER TROUGH AND THE DECAY OF THE OCEANIC HEAT CONTENT SOUTH OF 20S. A RAPID WEAKENING IS FORECAST ASSOCIATED AT LONGER RANGE WITH THE EXTRATROPICAL TRANSITION.

IRONDRO TRACK IS DRIVEN BY AN EQUATORIAL RIDGE IN MIDDLE TROPOSPHERE IN ITS NORTH-EASTERN QUADRANT CONDUCTING TO A SOUTH-EASTWARD TRACK. THIS WEEK-END, ITS MOVEMENT IS EXPECTED TO BE INFLUENCED BY THE DEEP UPPER TROUGH ARRIVING FROM THE SOUTH-WEST, WHICH IS EXPECTED TO MAINTAIN THE SWIFT SOUTH-EASTWARD TRACK. NUMERICAL GUIDANCE IS IN A GOOD AGREEMENT ON THE MAIN SCENARIO (THE SOUTH-EASTWARD TRACK) BUT THERE IS MORE UNCERTAINTY ON THE SPEED OF THE SYSTEM.