

WTIO30 FMEE 141812

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 39/9/20182019

1.A POST-TROPICAL DEPRESSION 9 (EX-GELENA)

2.A POSITION 2019/02/14 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 29.1 S / 87.7 E

(TWENTY NINE DECIMAL ONE DEGREES SOUTH AND
EIGHTY SEVEN DECIMAL SEVEN DEGREES EAST)

MOVEMENT: EAST-SOUTH-EAST 16 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 998 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 40 KT

RADIUS OF MAXIMUM WINDS (RMW): 56 KM

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

28 KT NE: 300 SE: 260 SW: 110 NW: 130

34 KT NE: 200 SE: 150 SW: 70 NW: 70

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS:

12H: 2019/02/15 06 UTC: 30.4 S / 89.7 E, VENT MAX= 040 KT, POST-TROPICAL
DEPRESSION

24H: 2019/02/15 18 UTC: 32.3 S / 91.0 E, VENT MAX= 035 KT, POST-TROPICAL
DEPRESSION

36H: 2019/02/16 06 UTC: 35.3 S / 93.2 E, VENT MAX= 030 KT, EXTRATROPICAL
DEPRESSION

48H: 2019/02/16 18 UTC: 36.4 S / 96.0 E, VENT MAX= 025 KT, EXTRATROPICAL
DEPRESSION

60H: 2019/02/17 06 UTC: 36.5 S / 98.8 E, VENT MAX= 025 KT, REMNANT LOW

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

WATER VAPOR IMAGERY AND 200 HPA POTENTIAL VORTICITY ANALYSIS SHOW THAT
THE SYSTEM INTERACTS NOW WITH THE STRATOSPHERIC DRY AIR ASSOCIATED TO
AN UPPER LEVEL TROUGH. SO, THE SYSTEM IS DOWNGRADED AT POST-TROPICAL
STAGE. TOMORROW, THE EXTRAPOLISATION PROCESS SHOULD CONTINUE WITH
FRONTAL CHARACTERISTICS BEFORE A SLOWLY WEAKENING FROM THE END OF
THE WEEK.

ALWAYS GUIDED BY NEAR-EQUATORIAL MID-LEVEL RIDGE, GELENA MAINTAINS AN EAST-SOUTH-EAST TRACK WHICH IS QUITE FAST, AND THAT THE MODELS UNDERESTIMATE OVER SHORT PERIODS. THIS TRACK IS EXPECTED TO SLOW DOWN AND TURN SOUTHEAST OVER THE NEXT 12 HOURS. IN THE WAKE OF THE TROUGH WHICH PASSED SOUTH OF THE SYSTEM, GELENA WILL EVACUATE MORE CLEARLY TO THE SOUTH-EAST AT THE BEGINNING OF THE WEEKEND.