

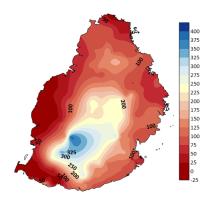
MAURITIUS METEOROLOGICAL SERVICES

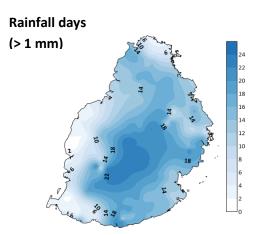
CLIMATE AUGUST 2023

Introduction

August 2023 was a very warm month, being the second warmest on record after that of 2017. Excess rainfall was recorded during August 2023. The El Nino Southern Oscillation (ENSO) and the Indian Ocean Dipole (IOD) were in the positive phase while and the Subtropical Indian Ocean Dipole (SIOD) was in the neutral phase. The Maden Julian Oscillation evolved in the Indian Ocean during the last week of the month.

Monthly rainfall





Rainfall

Above normal rainfall was recorded in August 2023, amounting to 140 mm which represents 130 % of the long-term mean. About three quarter of the total rainfall was recorded in the first fortnight and the remaining amount in the second fortnight.

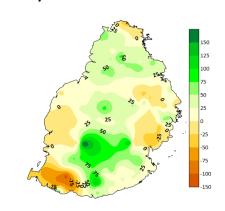
Rainfall was in excess over most of the Central Plateau and in the northern region. In regions like Arnaud, Union Park and Bois Cheri rainfall was in excess by 75-150 mm. However, to the South West and locally to the East, rainfall was deficient by 25-75 mm

The highest cumulative rainfall for the month was 388.7 mm recorded at Good End.

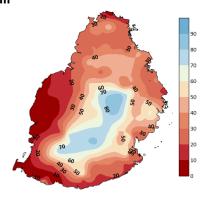
The highest number of rainy days (≥ 1 mm) was observed at Belle Rive and Good End with 24 and 23 rainy days respectively. Elsewhere, the number of rainy days varied between 2 and 22. Mostly slight rain was recorded during the month, especially in the first fortnight.

Highest 24-hour rainfall was 90.3 mm recorded at Bel Etang on 04 August 2023.

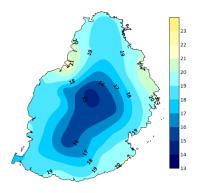
Monthly rainfall Anomaly

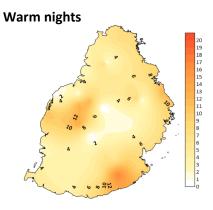


Highest 24-hour Rainfall

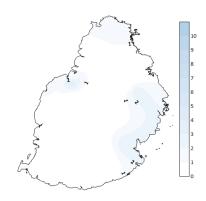


Minimum Temperature





Cold nights



Temperature

The mean temperature over the island was $1.0~^{\circ}\text{C}$ warmer than the LTM of 1991-2020. The mean minimum temperature and the mean maximum temperature were $0.9~^{\circ}\text{C}$ and $1.1~^{\circ}\text{C}$ warmer than the normal respectively.

The highest maximum recorded was 30.8 $^{\rm o}{\rm C}$ at Riviere Noire on 13 August. The lowest maximum temperature recorded was 16.9 $^{\rm o}{\rm C}$ at Grand Bassin on 06 August.

The highest minimum was 23.4 °C at Port Louis on 25 August and the lowest minimum was 13.5 °C at Mon Bois on 07 August.

A few warm nights were observed during the month with the highest being 13 warm nights at Vacoas and 12 warm nights at Mon Desert Alma and Reduit.

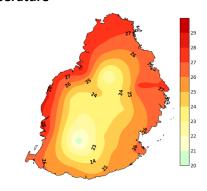
Days were particularly warm during the month especially to the east, over parts of the central plateau, the extreme West and the northern regions. The highest number of warm days was 24 at Albion, 22 at Queen Victoria and 19 at Mon Loisir Rouillard.

Very few cold nights and cold days were recorded during the month.

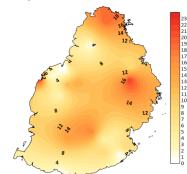
The highest number of cold nights was 4 at Domaine Les Pailles and 3 at Riche en Eau and Queen Victoria.

The highest number of cold nights recorded was 4 at Rose Belle.

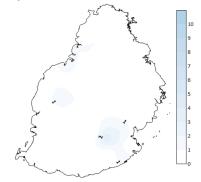
Maximum Temperature

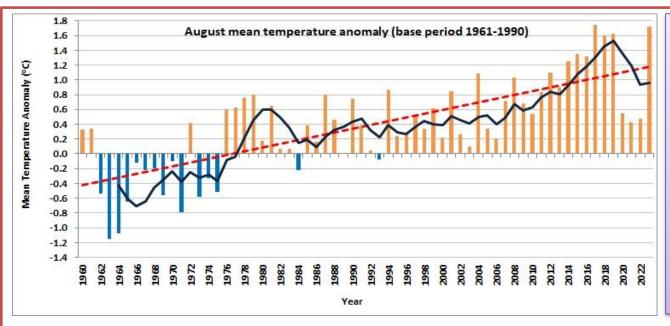


Warm days



Cold days

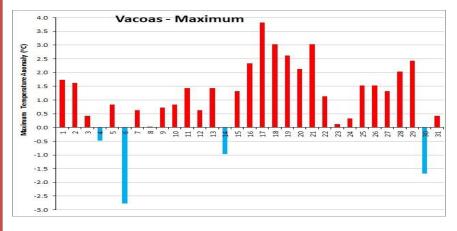


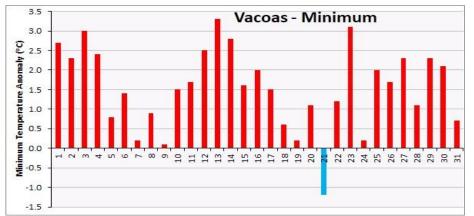


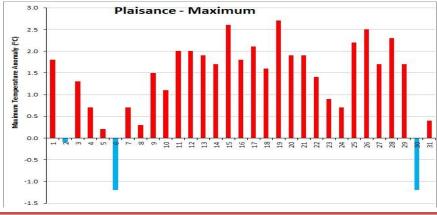
August 2023 was the second warmest since 1960.

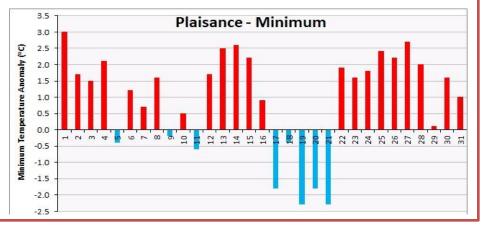
Daytime and night time temperatures were most of the time warmer both at Plaisance and Vacoas. On several occasions, both stations recorded positive anomalies of more than 2 °C in both the maximum and minimum temperatures.

However, on a few occasions, during the second fortnight, a drop in the minimum temperature of about 2 °C were noted at Plaisance.







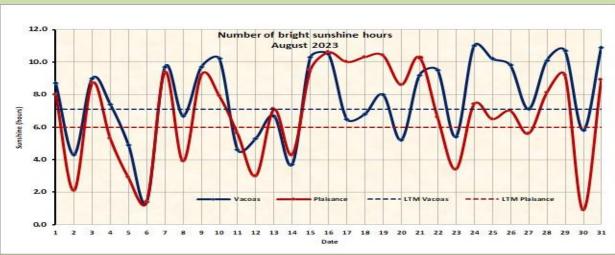


Sunshine and Humidity

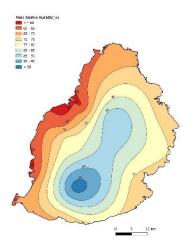
On average the mean relative humidity for the month was close to the normal both at Vacoas and Plaisance. The daily humidity ranged from 73 to 93 % at Vacoas and from 60 to 88 % at Plaisance.

The number of daily bright sunshine hours were 107% of the normal at Vacoas and 113% at Plaisance (anomaly of +0.5 at Vacoas and +0.8 at Plaisance). The highest number of sunshine hours at Vacoas was 11 (recorded on 24 August) and 10.6 at Plaisance (recorded on 16 August). The lowest number of sunshine hours was 1.4 at Vacoas (recorded on 06 August) and 0.9 at Plaisance (recorded on 30 August). The total number of monthly bright sunshine hours was 239.3 at Vacoas and 212.1 at Plaisance.

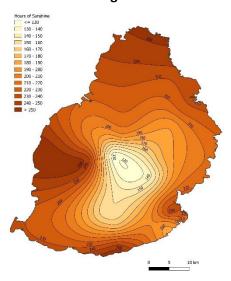




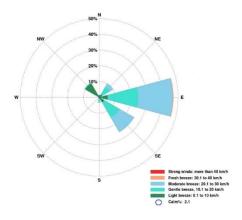
Monthly mean humidity August 2023



Monthly total sunshine hours August 2023



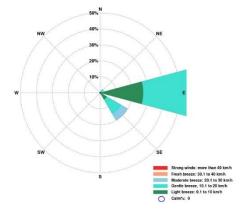
Winds



Wind frequencies from Plaisance (left) and Vacoas (right) show winds mainly from the south eastern and eastern sectors. Light to moderate winds prevailed most of the time over the island. However, on a few occasions, strong winds were observed both at Vacoas and Plaisance.

The highest gusts recorded over the island were as follows:

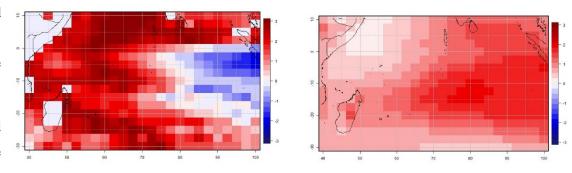
Regions	Highest gusts (km/h	Date
Champ de Mars	86	6
Vacoas	76	6
Dom. les Pailles	72	5
St. Felix	65	5
N. Decouverte	61	6
Grand Bassin	61	4
Riche Terre	60	6
Plaisance	60	23



FORECAST FOR OCTOBER-NOVEMBER-DECEMBER (OND)

El Nino conditions are expected to strengthen gradually and become moderate to strong by the end of the forecast period. The IOD is expected to remain in the positive phase while the SIOD to be neutral.

Sea surface temperature and pressure anomalies are expected to be above normal in the Mascarene region as shown in the SST and pressure anomaly charts respectively.



(a) Sea surface temperature and (b) pressure anomaly charts for OND

Consensus forecast for Mauritius

Cumulative rainfall for October to December is expected to be normal. The monthly rainfall forecast consensus is as follows: -

• October: slightly above normal (~ 90 mm)

• November: normal (~ 80 mm)

• December: normal (~ 150 mm)

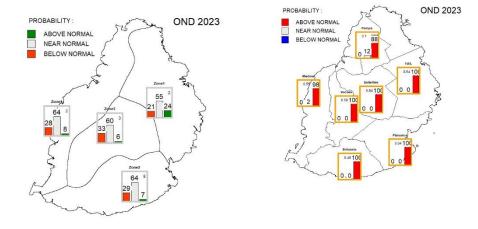
Mean temperature is forecasted to be above normal over the whole island.

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Statistical Model Forecast of (a) rainfall and (b) temperature for OND