

MAURITIUS METEOROLOGICAL SERVICES

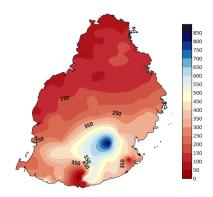
CLIMATE NOVEMBER 2023

Introduction

November 2023 was a very wet and quite warm month. The El Nino Southern Oscillation (ENSO) was in the positive phase and continued to strengthen while the Indian Ocean Dipole (IOD) and the Subtropical Indian Ocean Dipole (SIOD) were in the neutral phase. The Maden Julian Oscillation signal was weak in the Indian Ocean. No tropical storm formed in the South West Indian Ocean basin during the month.

Monthly rainfall

Rainfall days



Well above normal rainfall was recorded in November 2023, amounting to 286 mm and which represents 336 % of the long-term mean. About 75% of the total rainfall was recorded in the first fortnight and the remaining amount in the second fortnight

Rainfall

Rainfall was in excess mainly over the southern part of the island by 200-600 mm. Over the remaining parts of the island normal rainfall was recorded.

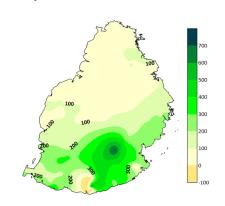
The highest cumulative rainfall for the month was 858.1 mm recorded at Mon Vernon.

(> 1 mm)

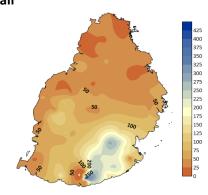
The highest number of rainy days (≥ 1 mm) was observed at Arnaud and Good End with 23 rainy days respectively. Elsewhere, the number of rainy days varied between 6 and 22.

Highest 24-hour rainfall was 421.6 mm recorded at St Aubin 07 November 2023.

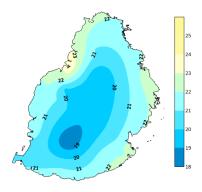
Monthly rainfall Anomaly



Highest 24-hour Rainfall

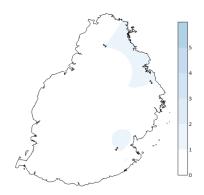


Minimum Temperature



Warm nights 15 14 13 11 10 9 8 7 6 6 6 4 3 3 2 1 1 0

Cold nights



Temperature

The mean temperature over the island was $0.55~^{\circ}\text{C}$ warmer than the LTM of 1991-2020. The mean minimum temperature and the mean maximum temperature were $0.9~^{\circ}\text{C}$ and $0.2~^{\circ}\text{C}$ warmer than the normal respectively.

The highest maximum recorded was $33.4\,^{\circ}\text{C}$ at Champs de Mars on $20\,^{\circ}$ and $27\,^{\circ}\text{November}$. The lowest maximum temperature recorded was $20.0\,^{\circ}\text{C}$ at Grand Bassin on $06\,^{\circ}\text{November}$.

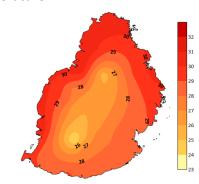
The highest minimum was 26.1 °C at Port Louis on 21 November and the lowest minimum was 16.4 °C at Grand Bassin on 19 November.

Nights and days were particularly warm during the month. The highest number of warm nights observed during the month were 16 at Mon Desert Alma, 12 at Bois Cheri and 11 at Vacoas.

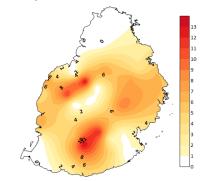
The highest number of warm days were 13 at Bois Cheri and Mon Desert Alma, 12 at Union Park and 11 at Quatre Bornes respectively.

Very few cold nights and cold days were recorded during the month. The highest number of cold nights was 02 at Riche en Eau and the highest number of cold days was 4 at Rose Belle and Riche en Eau.

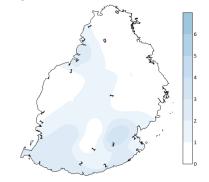
Maximum Temperature

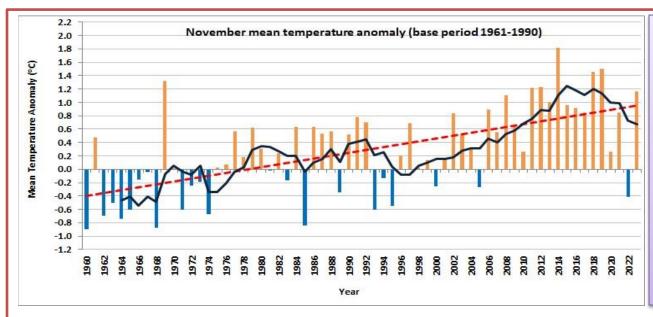


Warm days



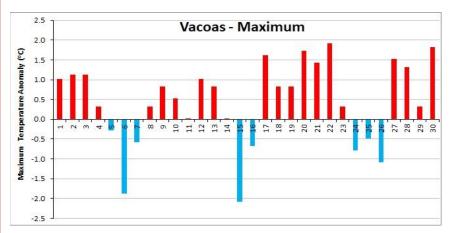
Cold days

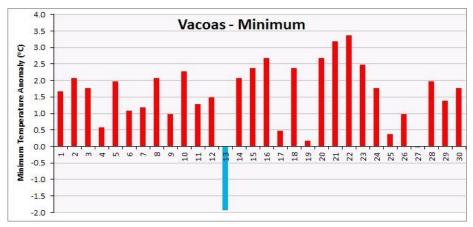


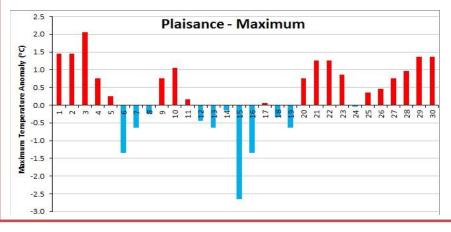


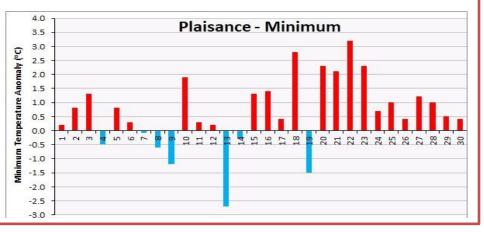
Daytime and night time temperatures were most of the time warmer both at Plaisance and Vacoas. On several occasions, both stations recorded positive anomalies of more than 1 °C in the maximum and minimum temperatures.

However, on a few occasions, during the first and second weeks of the month, a significant drop of about 2 °C in the maximum temperature were noted both at Vacoas and Plaisance due cloudiness and rainy periods.





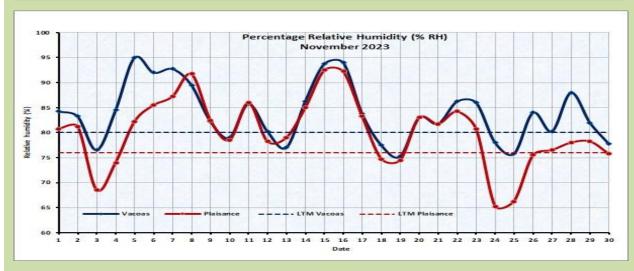


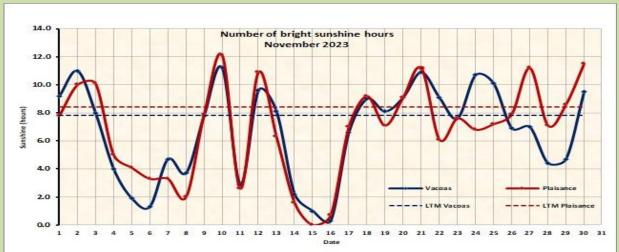


Sunshine and Humidity

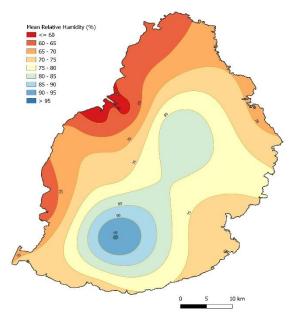
On average the mean relative humidity for the month was close to the normal both at Vacoas and Plaisance. The daily humidity ranged from 75 to 95 % at Vacoas and from 65 to 93 % at Plaisance.

The number of daily bright sunshine hours were 86 % of the normal at Vacoas and 81 % at Plaisance (anomaly of -1.1 at Vacoas and -1.6 at Plaisance). The highest number of sunshine hours at Vacoas was 11.2 and 12.1 at Plaisance (recorded on 10 November at both stations). The lowest number of sunshine hours was 0.3 at Vacoas (recorded on 16 November) and 0.0 at Plaisance (recorded on 15 November). The total number of monthly bright sunshine hours was 200.6 at Vacoas and 205.3 at Plaisance.

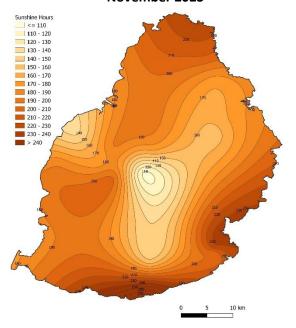




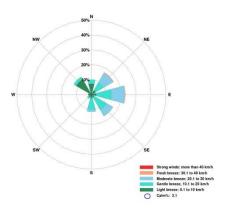
Monthly mean humidity November 2023



Monthly total sunshine hours November 2023



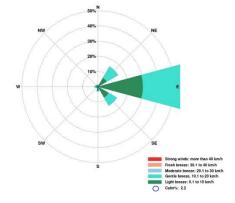
Winds



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

The highest gusts recorded over the island were as follows:

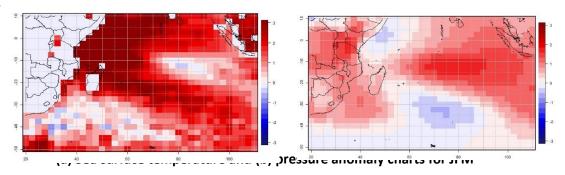
Regions	Highest gusts (km/h	Date
Champ de Mars	79	24
Dom. les Pailles	68	24
Albion	65	24
Riv des Anguilles	63	7
Bois Mangues	59	24
Riv. Noire	58	24
Riche Terre	54	24
N. Decouverte	54	24
St. Felix	54	24
Bell Village	52	24
Vacoas	51	4
Grand Bassin	50	24



FORECAST FOR JANUARY-MARCH (JFM)

El Nino conditions are expected to remain strong by the end of the forecast period. The IOD is expected to become neutral while the SIOD will remain in the negative phase.

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



Consensus forecast for Mauritius

Cumulative rainfall for January to March 2024 is expected to be well above normal. The monthly rainfall forecast consensus is as follows: -

• January: Well above normal (~ 575 mm)

• February: Normal (~ 325 mm)

• March: Normal (~ 300 mm)

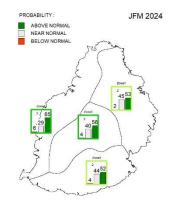
Mean temperature is forecasted to be above normal over the whole island.

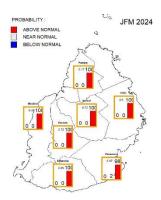
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Statistical Model Forecast of (a) rainfall and (b) temperature for JFM