

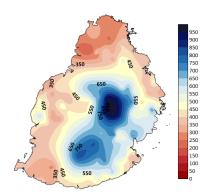
MAURITIUS METEOROLOGICAL SERVICES

CLIMATE JANUARY 2024

Introduction

January 2024 was the fourth wettest since the last 30 years. Mean temperature was slightly warmer than the normal for the month. The El Nino Southern Oscillation (ENSO) and the Indian Ocean Dipole (IOD) were in the positive phase while the Subtropical Indian Ocean Dipole (SIOD) was in the negative phase. The Maden Julian Oscillation signal was weak in the Indian Ocean. Two tropical storms, namely Belal and Candice formed in the South West Indian Ocean basin and during the month and influenced weather over Mauritius.

Monthly rainfall



Rainfall days (> 1 mm) 30 28 26 24 22 20 18 16 14 12 10 8 6 6 4 2

Rainfall

January 2024 was the fourth wettest since the last 30 years, amounting to 574 mm of rainfall and which represents 204 % of the long-term mean. Rainfall was in excess in almost all regions, especially over the Central Plateau where it was in excess by 400-500 mm.

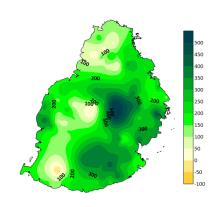
About 70% of the total rainfall was recorded in the first fortnight and the remaining amount in the second fortnight. One torrential rain event was recorded on 28 January.

The highest cumulative rainfall for the month was 999.5 mm recorded at Grande Providence.

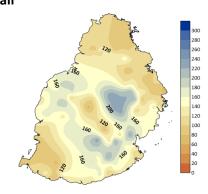
The highest number of rainy days (≥ 1 mm) was observed at Bois Cheri, Mon Vernon and Belle Rive with 26 rainy days respectively. Elsewhere, the number of rainy days varied between 8 and 25.

Highest 24-hour rainfall was 240 mm recorded at Providence, Quartier Militaire on 15 January.

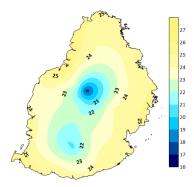
Monthly rainfall Anomaly



Highest 24-hour Rainfall

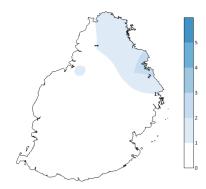


Minimum Temperature



Warm nights 18 16 14 12 10 8 6 4 2

Cold nights



Temperature

The mean temperature over the island was $0.6~^{\circ}\text{C}$ warmer than the LTM of 1991-2020. The mean minimum temperature and the mean maximum temperature were $0.8~^{\circ}\text{C}$ and $0.4~^{\circ}\text{C}$ warmer than the normal respectively.

The highest maximum recorded was 35.3 $^{\circ}$ C at Riviere Noire on 09 January. The lowest maximum temperature recorded was 22.4 $^{\circ}$ C at Grand Bassin on 16 January.

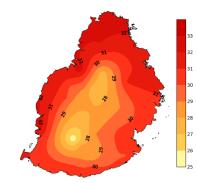
The highest minimum was 27.8 $^{\circ}$ C at Le Morne and at Port Louis, recorded on 04 and 05 January respectively. The lowest minimum was 18.2 $^{\circ}$ C at Bois Cheri on 18 January.

Nights and days were particularly warm during the month. The highest number of warm nights observed during the month was 17 at Sans Souci and 15 at Union Park respectively.

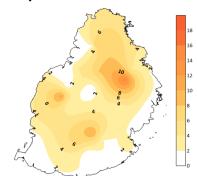
The highest number of warm days was 15 at Fuel and 11 at Quatres Bornes.

Few cold nights and cold days were recorded during the month. The highest number of cold nights was 02 at Belle Mare and Champs de Mars. The highest number of cold days was 07 at Britania.

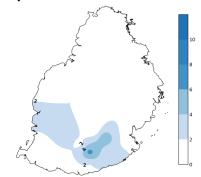
Maximum Temperature

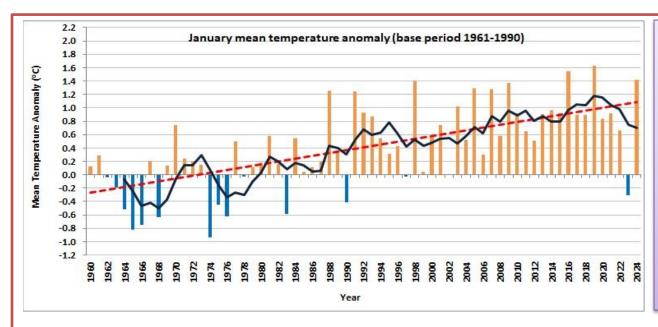


Warm days



Cold days

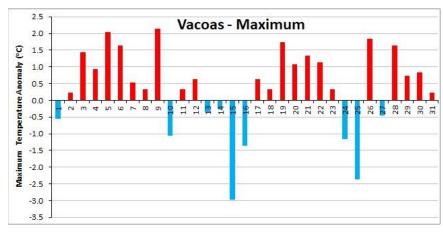


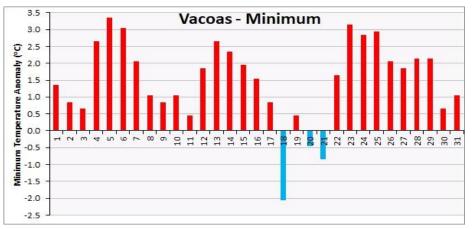


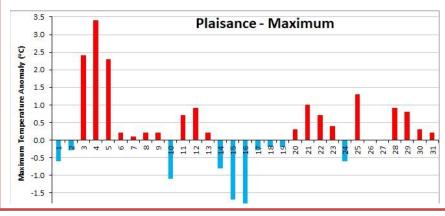
January 2024 was the fourth warmest since 1960.

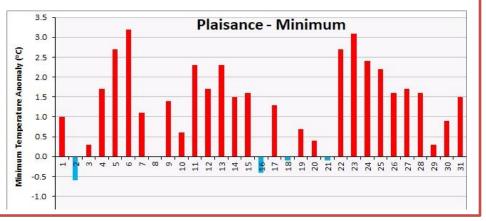
Daytime and night time temperatures were most of the time warmer both at Plaisance and Vacoas. On several occasions, both stations recorded positive anomalies of 1-2 °C in the maximum and minimum temperatures.

However, on a few occasions, by the mid of the month, a significant drop of about 2-3 °C in the maximum temperature was noted both at Vacoas and Plaisance due to prolonged periods of cloudiness.





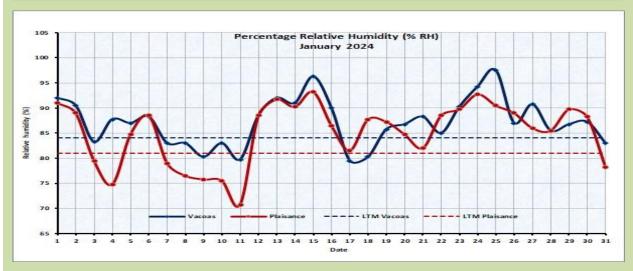


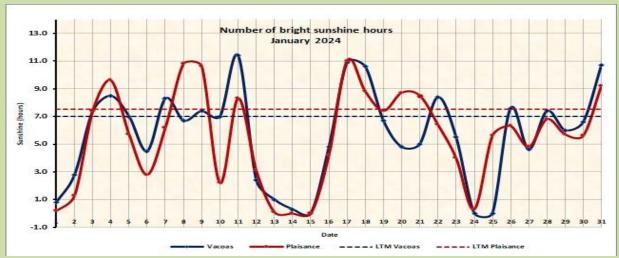


Sunshine and Humidity

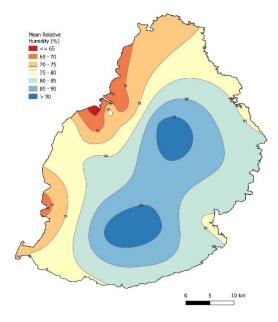
On average the mean relative humidity for the month was close to the normal both at Vacoas and Plaisance. The daily humidity ranged from 80 to 98 % at Vacoas and from 71 to 93 % at Plaisance.

The number of daily bright sunshine hours were 81 % of the normal at Vacoas and 74 % at Plaisance (anomaly of -1.4 at Vacoas and -2.0 at Plaisance). The highest number of sunshine hours at Vacoas was 11.4 (recorded on 11 January) and 11.0 at Plaisance (recorded on 17 January). The lowest number of sunshine hours was 0 both at Vacoas (recorded on 15, 24 and 25 January) and at Plaisance (recorded on 14 and 15 January). The total number of monthly bright sunshine hours was 175.1 at Vacoas and 171.6 at Plaisance.

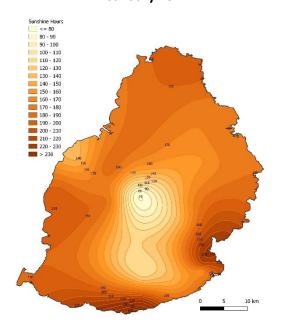




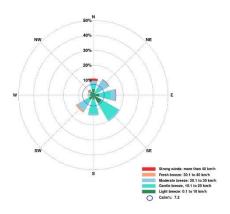
Monthly mean humidity January 2024



Monthly total sunshine hours January 2024



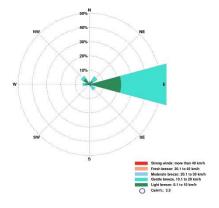
Winds



Wind frequencies from Plaisance (left) and Vacoas (right) show winds mainly from the Eastern sectors. However, on a few occasions Southerly and Northerly winds were also recorded, mainly at Plaisance. While light to moderate winds prevailed most of the time over the island, on certain days, strong winds were also recorded both at Plaisance and Vacoas, mainly during the passage of tropical storms Belal and Candice.

The highest gusts recorded over the island were as follows:

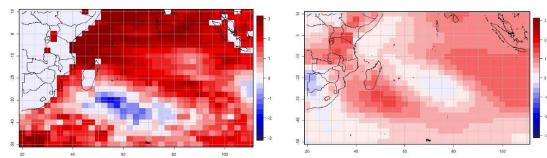
Regions	Highest gusts (km/h	Date
N. Decouverte	122	15
Riv des Anguilles	120	15
St. Felix	115	15
Grand Bassin	112	15
Signal Mt.	111	15
Vacoas	105	15
Plaisance	103	15
Q. Victoria	90	15



FORECAST FOR MARCH-MAY (MAM)

Neutral ENSO conditions are expected to establish by the end of the forecast period. The IOD is expected to be in the positive phase while the SIOD is forecasted to be in the neutral 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.



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

Consensus forecast for Mauritius

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

• March: Normal (~ 300 mm)

• April: Normal (~ 200 mm)

• May: Normal (~ 140 mm)

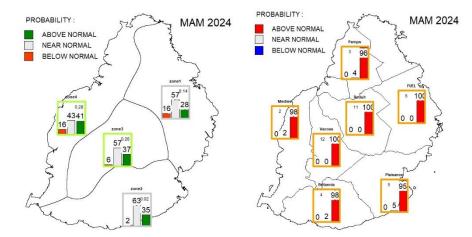
Mean temperature is forecasted to be above normal over the whole island.

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