

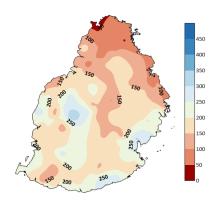
MAURITIUS METEOROLOGICAL SERVICES

CLIMATE APRIL 2023

Introduction

Rainfall was slightly below normal for April 2023 and the mean temperature over the island was warmer than the normal except the last day which was exceptionally cold. No storm formed in the South West Indian Ocean basin. The El Nino Southern Oscillation (ENSO), the Indian Ocean Dipole (IOD) and the Subtropical Indian Ocean Dipole (SIOD) were in the neutral phase. The Maden Julian Oscillation evolved in the Indian Ocean during the last week of the month.

Monthly rainfall



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

Rainfall

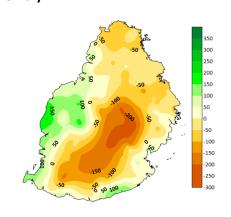
Slightly below normal rainfall was recorded in April 2023, amounting to 178 mm and which represents 86 % of the long-term mean for the month. About two third of the rainfall amount was recorded in the first fortnight and the remaining amount in the second fortnight. About four heavy rainfall episodes were recorded. Rainfall was in excess by about 50-150 mm in the west and the extreme south of the island but deficient in other regions. Over the central plateau it was deficient by 100-200 mm and by 50-100 mm elsewhere.

The highest cumulative rainfall for the month was 346.4 mm recorded at Vacoas.

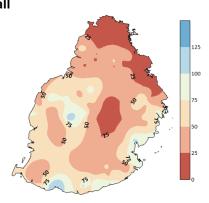
The highest number of rainy days (≥ 1 mm) was observed at Terracine, Union Savanne, Grande Retraite and Constance with 22 rainy days. Elsewhere the number of rainy days varied between 5 and 21 rainy days.

Highest 24-hour rainfall was 121.4 mm recorded at Ste Marie on 6 April 2023.

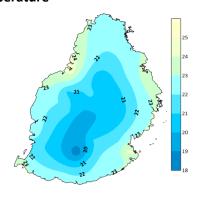
Monthly rainfall Anomaly



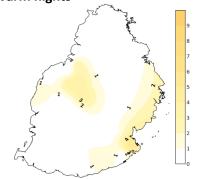
Highest 24-hour Rainfall



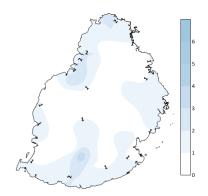
Minimum Temperature



Warm nights



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 $0.2~^{\circ}\text{C}$ and $0.9~^{\circ}\text{C}$ warmer than the normal respectively.

The highest maximum recorded was 33.8 °C at Champs de Mars and Riviere Noire on Day 14 and Day 30 respectively. The lowest maximum temperature recorded was 22.4 °C at Grand Bassin on Day 27.

The highest minimum was 26.7 °C at Port Louis on Day 01 and the lowest minimum was 15.2 °C at Bois Cheri on Day 30.

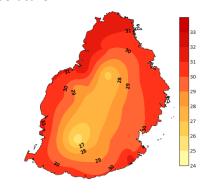
A few warm nights were observed during the month with the highest being 6 warm nights at Beau Vallon.

Days were particularly warm during the month especially to the north and over the central plateau. The highest number of warm days was 19 at Mon Loisir Rouillard and Bois Cheri.

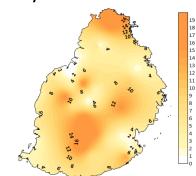
The highest number of cold nights was 4, recorded at Bois Cheri and Pamplemousses.

Practically no cold day was observed during the month. Exception is the last day of the month.

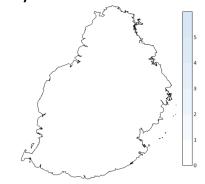
Maximum Temperature

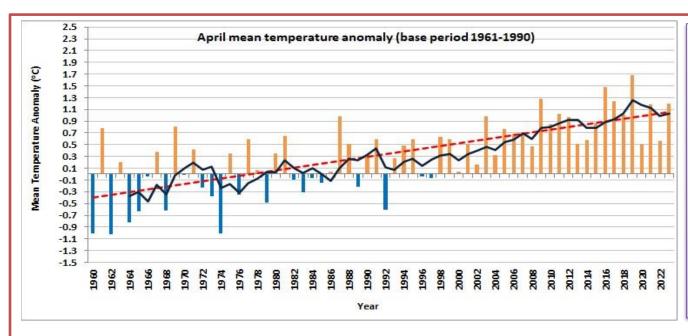


Warm days



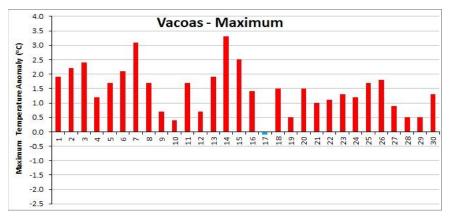
Cold days



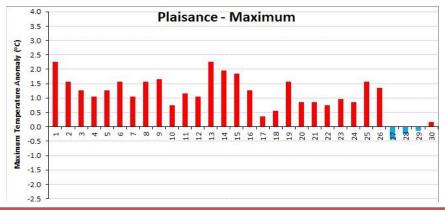


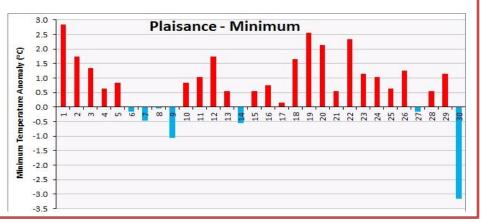
April 2023 was among the fifth warmest years during the past 20 years. Daytime and night time temperatures were most of the time 0.5 to 1.5 °C warmer both at Plaisance and Vacoas. On a few occasions, both the maximum and minimum temperatures were warmer by about 2 to 3 °C.

However, on the last day of the month, a significant drop in minimum temperature of 1.5 °C and 3 °C were observed at Vacoas and Plaisance respectively due to advection of a cooler airmass.





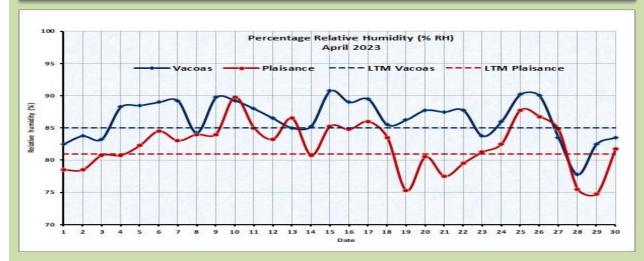


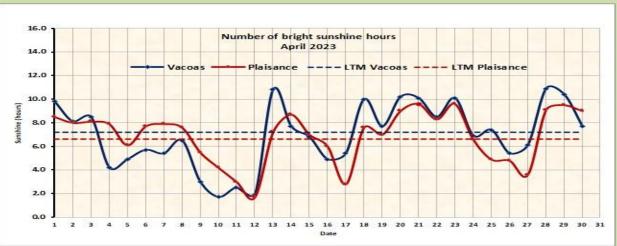


Sunshine and Humidity

On average the mean relative humidity for the month was close to the normal both at Vacoas and Plaisance. The daily humidity ranged from 78 to 91 % at Vacoas and from 75 to 90 % at Plaisance.

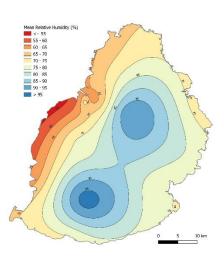
The number of daily bright sunshine hours were 97 % of the normal at Vacoas and 104 % at Plaisance (anomaly of -0.2 and +0.3 at Vacoas and Plaisance respectively). The highest number of sunshine hours at Vacoas was 10.9 (recorded on Day 28) and 9.6 at Plaisance (recorded on Day 21 and 23). The lowest number of sunshine hours was 1.7 both at Vacoas (recorded on Day 10) at Plaisance (recorded on Day 12). The total number of monthly bright sunshine hours was 209.2 at Vacoas and 206.5 at Plaisance.





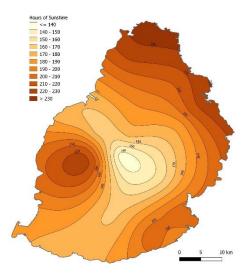
Monthly mean humidity



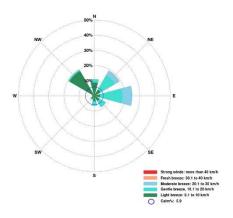


Monthly total sunshine hours

Hours of Sunshine



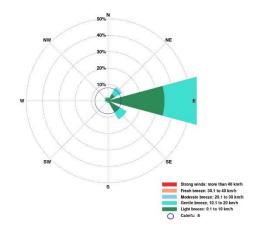
Winds



Wind frequencies from Plaisance (left) show winds mainly from the north western, north eastern and eastern sectors while at Vacoas (right) winds were mainly from the eastern sector. Light to moderate winds prevailed most of the time over the island.

The highest gusts recorded over the island were as follows:

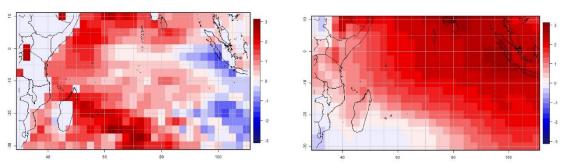
Regions	Highest gusts (km/h	Date
Bell Village	70	10
Champ de Mars	65	10
Bois Mangues	56	10
Domaine les Pailles	50	28
Nouvelle Decouverte	47	19
Grand Bassin	47	19
Plaisance	47	10



FORECAST FOR JUNE-JULY-AUGUST (JJA)

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

Sea Surface Temperature and pressure anomaly 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 JJA

Consensus forecast for Mauritius

Cumulative rainfall for June to August is expected to be slightly below normal. The monthly rainfall forecast consensus is as follows: -

June: below normal (~ 80 mm)

• July: normal (~ 130 mm)

• August: normal (~100 mm)

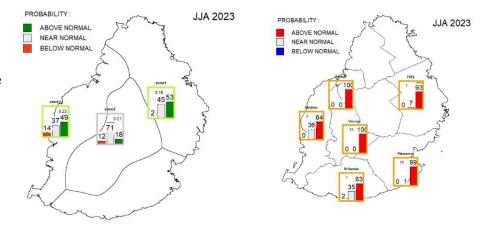
Mean temperature is forecasted to be slightly above normal over the whole island.

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