

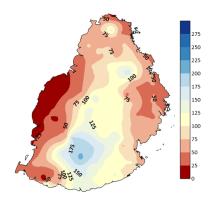
MAURITIUS METEOROLOGICAL SERVICES

CLIMATE JUNE 2023

Introduction

Rainfall was deficient almost over the whole island during June 2023 and the mean temperature was warmer than the normal. The El Nino Southern Oscillation (ENSO) and the Indian Ocean Dipole (IOD) were in the neutral phase while the Subtropical Indian Ocean Dipole (SIOD) was in the positive phase. The Maden Julian Oscillation evolved in the Indian Ocean during the first fortnight.

Monthly rainfall



Rainfall days (> 1 mm) 22 20 18 16 14 12 10 8 6

Rainfall

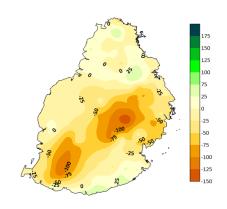
Below normal rainfall was recorded in June 2023, amounting to 86 mm and which represents 74 % of the long-term mean. Rainfall was deficient almost over the whole island, especially to the south west and over the Central Plateau by about 75-150 mm. However, locally in the north, rainfall was in excess by about 25 mm. About three quarter of the total rainfall was recorded in the first fortnight and the remaining amount in the second fortnight. About two heavy rainfall episodes were recorded during the month.

The highest cumulative rainfall for the month was 206.5 mm recorded at Bois Cheri.

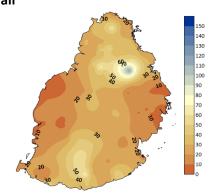
The highest number of rainy days (≥ 1 mm) was observed at Belle Rive MSIRI and Arnaud with 24 rainy days. Elsewhere the number of rainy days varied between 2 and 23. Rainfall was mostly slight rain possibly as in spite of so many rain days, the CP and SW was deficient.

Highest 24-hour rainfall was 115.0 mm recorded at Grande Retraite on 05 June 2023.

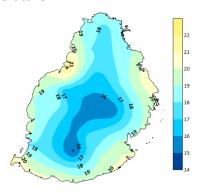
Monthly rainfall Anomaly



Highest 24-hour Rainfall

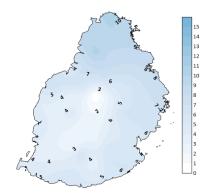


Minimum Temperature



Warm nights

Cold nights



Temperature

The mean temperature over the island was $0.3~^{\circ}\text{C}$ warmer than the LTM of 1991-2020. The mean minimum temperature and the mean maximum temperature were $0.2~^{\circ}\text{C}$ and $0.4~^{\circ}\text{C}$ warmer than the normal respectively.

The highest maximum recorded was $31.2~^{\circ}\text{C}$ at Riviere Noire on Day 11. The lowest maximum temperature recorded was $16.5~^{\circ}\text{C}$ at Grand Bassin on Day 25.

The highest minimum was 24.6 °C at Port Louis on Day 12 and the lowest minimum was 10.5 °C at Mon Bois on Day 30.

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

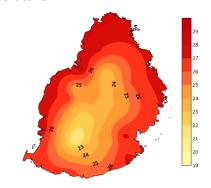
Days were particularly warm during the month especially to the north, the east and the western regions. The highest number of warm days was 19 at Quatre Bornes.

Nights were particularly cold in the northern regions where the highest number of cold nights was 11 at Bois Mangues. Elsewhere it varied

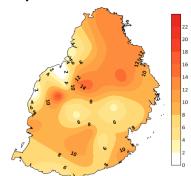
between 2 and 10.

The highest number of cold days was 5, recorded at Rose Belle and Le Morne.

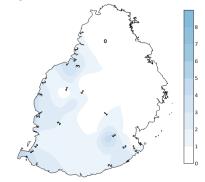
Maximum Temperature

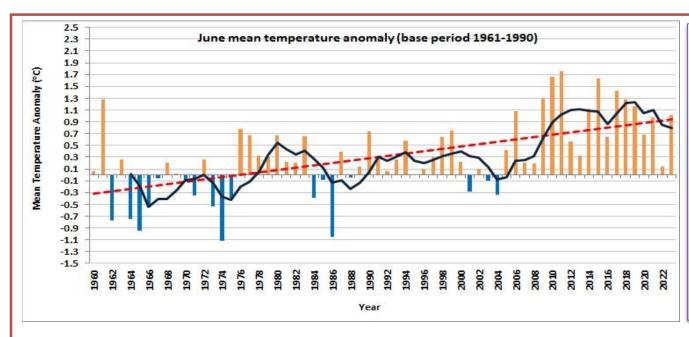


Warm days



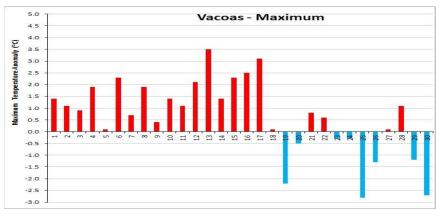
Cold days

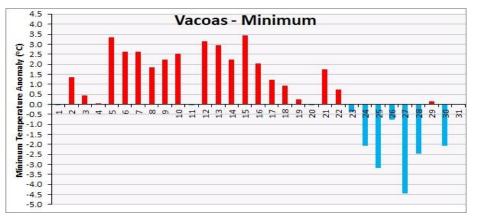


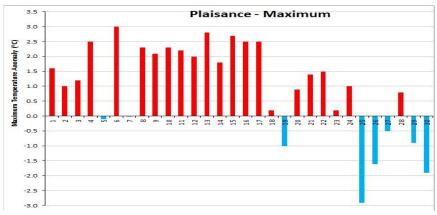


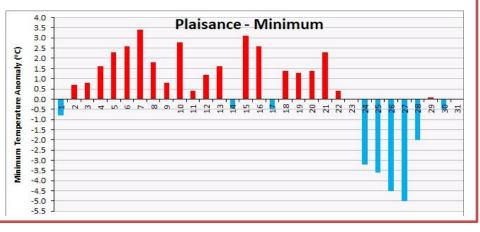
Daytime and night time temperatures were most of the time warmer both at Plaisance and Vacoas. On several occasions, the maximum temperature and minimum temperature anomalies were higher by 2 °C at both stations.

However, a significant drop in the maximum temperature of above 2 °C and in the minimum temperature of above 3 °C were noted at both Vacoas and Plaisance during the last week of the month due to advection of a cooler airmass.







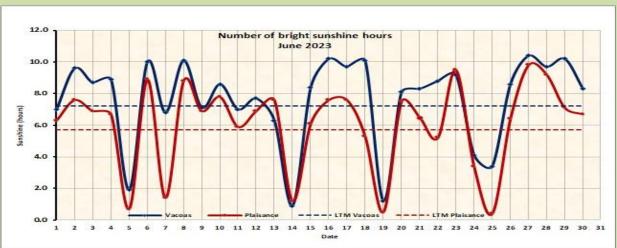


Sunshine and Humidity

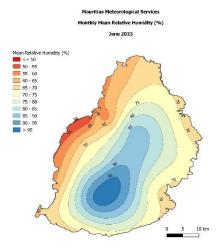
On average the mean relative humidity for the month was close to the normal both at Vacoas and Plaisance. The daily humidity ranged from 69 to 95 % at Vacoas and from 57 to 89 % at Plaisance. A significant drop in the relative humidity during the last week was observed at both stations due to advection of cold and dry air.

The number of daily bright sunshine hours were 106 % of the normal at Vacoas and 107 % at Plaisance (anomaly of 0.4 at both stations). The highest number of sunshine hours at Vacoas was 10.4 and 9.8 at Plaisance (recorded on Day 27 at both stations). The lowest number of sunshine hours was 0.9 at Vacoas (recorded on Day 14) and 0.4 at Plaisance (recorded on Day 25). The total number of monthly bright sunshine hours was 229.3 at Vacoas and 182.4 at Plaisance.

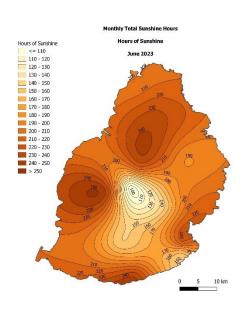




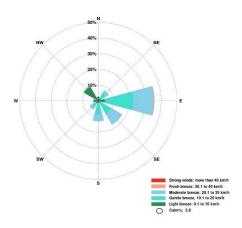
Monthly mean humidity



Monthly total sunshine hours



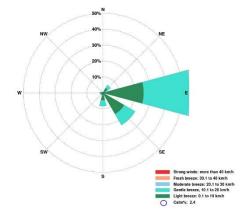
Winds



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 sector were recorded at Plaisance

The highest gusts recorded over the island were as follows:

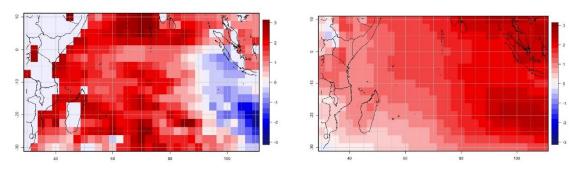
Regions	Highest gusts (km/h	Date
Champ de Mars	65	2
M. Loisir Rouillard	58	30
Dom. les Pailles	58	Often
N. Decouverte	58	5
Plaisance	58	5
Vacoas	55	2
Belle Mare	54	30
Q. Victoria	54	18
Grand Bassin	54	5
St. Felix	54	5



FORECAST FOR AUGUST-SEPTEMBER-OCTOBER (ASO)

El Nino conditions are expected to gradually establish by the end of the forecast period. The IOD is expected to be 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 ASO

Consensus forecast for Mauritius

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

• August: slightly above normal (~ 125 mm)

• September: slightly above normal (~ 105 mm)

• October: slightly above normal (~ 90 mm)

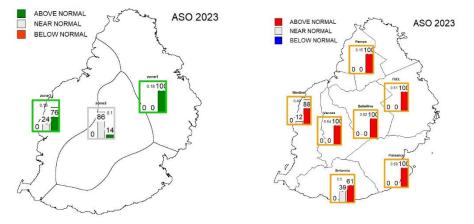
Mean temperature is forecasted to be slightly above normal over the whole island.

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