



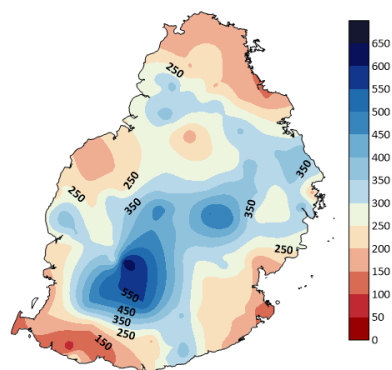
# MAURITIUS METEOROLOGICAL SERVICES

CLIMATE MARCH 2023

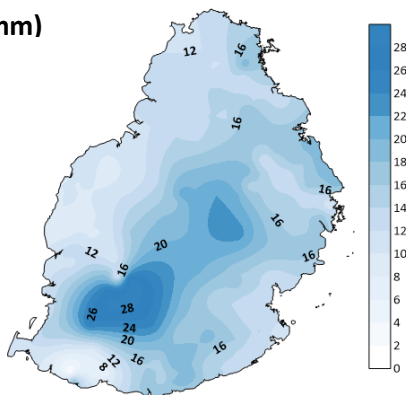
## Introduction

Rainfall was slightly above normal and the mean temperature over the island was cooler than normal for March 2023. No storm formed in the South West Indian Ocean basin during the month. The El Nino Southern Oscillation (ENSO), the Indian Ocean Dipole (IOD) and the Subtropical Indian Ocean Dipole (SIOD) were in the neutral phase during the month.

### Monthly rainfall



### Rainfall days (> 1 mm)



## Rainfall

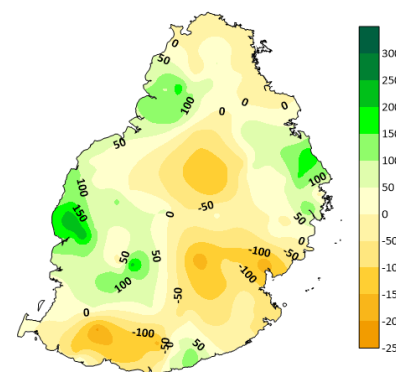
Slightly above normal rainfall was recorded over the island for the month of March 2023. The island recorded about 335 mm of rainfall, which represents 114 % of the long-term mean for the month. About two third of the rainfall amount was recorded in the first fortnight and the remaining amount in the second fortnight. About four heavy rainfall episodes were recorded during the month. Rainfall was mainly in excess by 100-150 mm to the west, part of CP and extreme east of the island and deficient by 50-150 mm elsewhere.

The highest cumulative rainfall for the month was 640.9 mm recorded at Good End.

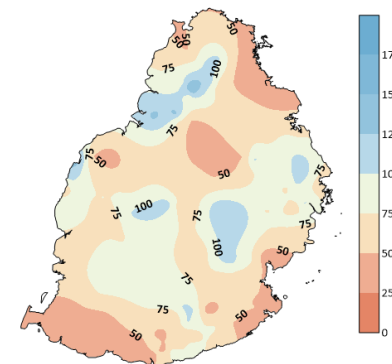
The highest number of rainy days ( $\geq 1$  mm) was observed at Arnaud with 29 rainy days. Elsewhere the number of rainy days varied between 10 and 28 rainy days.

Highest 24-hour rainfall was 145 mm recorded at Maison Blanche, Pointe aux Cannoniers on 06 March 2023.

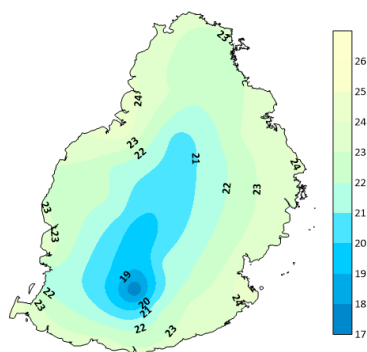
### Monthly rainfall Anomaly



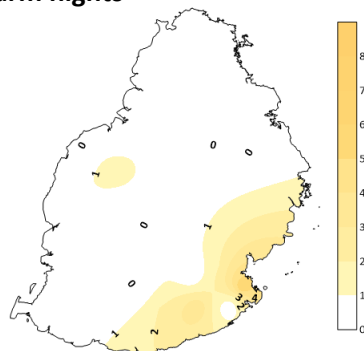
### Highest 24-hour Rainfall



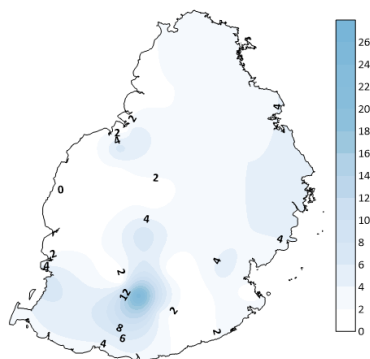
## Minimum Temperature



## Warm nights



## Cold nights



## Temperature

The mean temperature over the island was  $-0.35^{\circ}\text{C}$  cooler than the LTM of 1991-2020. The mean minimum temperature and the mean maximum temperature were  $-0.2^{\circ}\text{C}$  and  $-0.5^{\circ}\text{C}$  cooler than the normal respectively.

The highest maximum recorded was  $35.1^{\circ}\text{C}$  at Riviere Noire on Day 30. The lowest maximum temperature recorded was  $22.2^{\circ}\text{C}$  at Grand Bassin on Day 10.

The highest minimum was  $26.8^{\circ}\text{C}$  at Quatre Soeurs and Port Louis on Day 31 and the lowest minimum was  $16.7^{\circ}\text{C}$  at Mon Bois on Day 28.

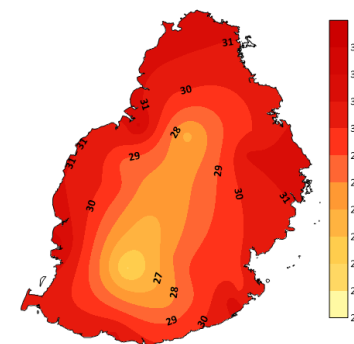
A few warm nights were observed mainly to the south east of the island with 6 warm nights at Beau Vallon.

Warm days were recorded mainly to the west of the island and part of the central plateau. The highest number of warm days was 0918 at Quatre Borneseen Victoria.

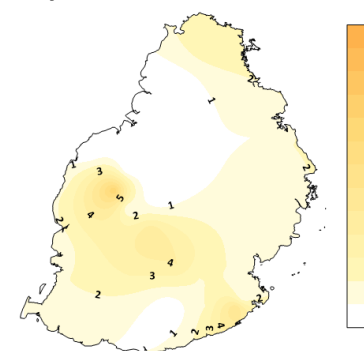
The highest number of cold nights recorded was 26 at Bois Cheri. Elsewhere the number of cold nights varied between 1 and 11.

The highest number of cold days was observed in the region of Pamplemousses with 12 cold days. In other regions it varied between 1 and 5.

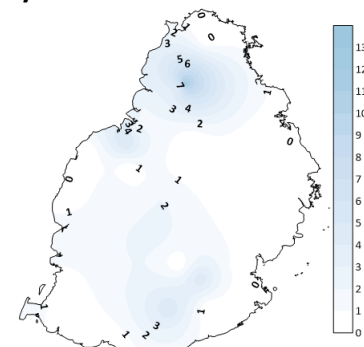
## Maximum Temperature

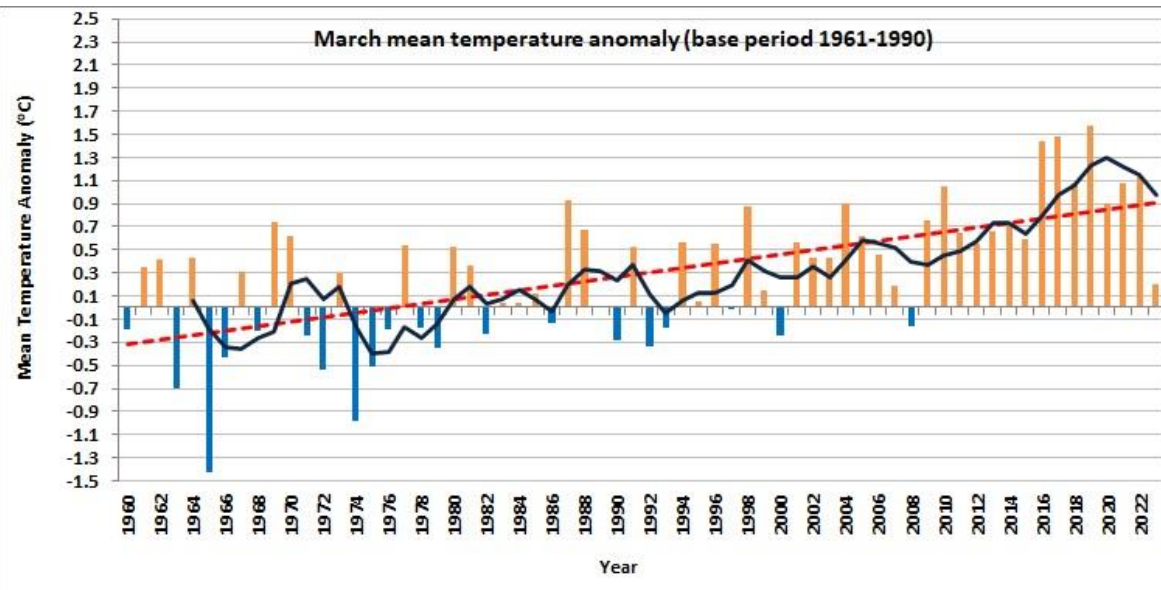


## Warm days



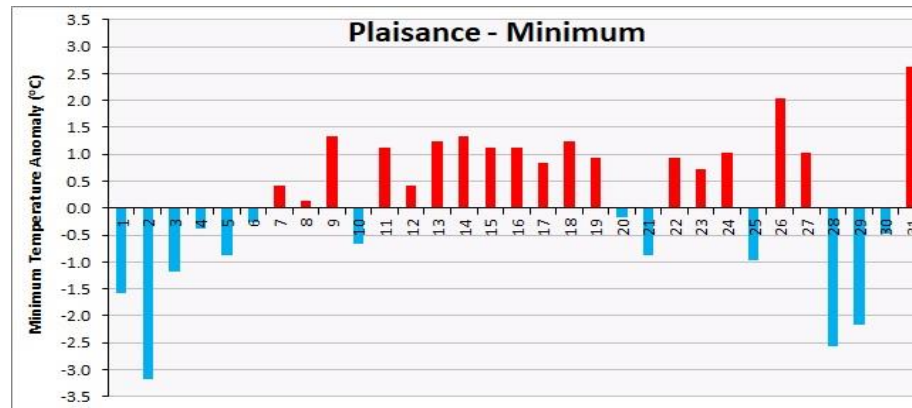
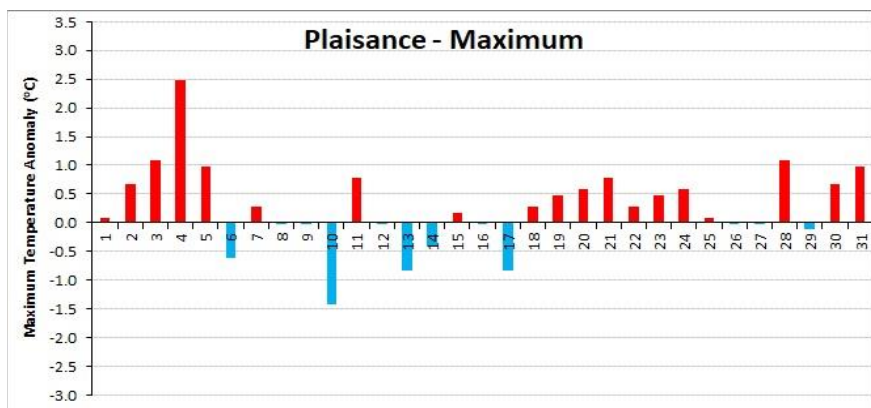
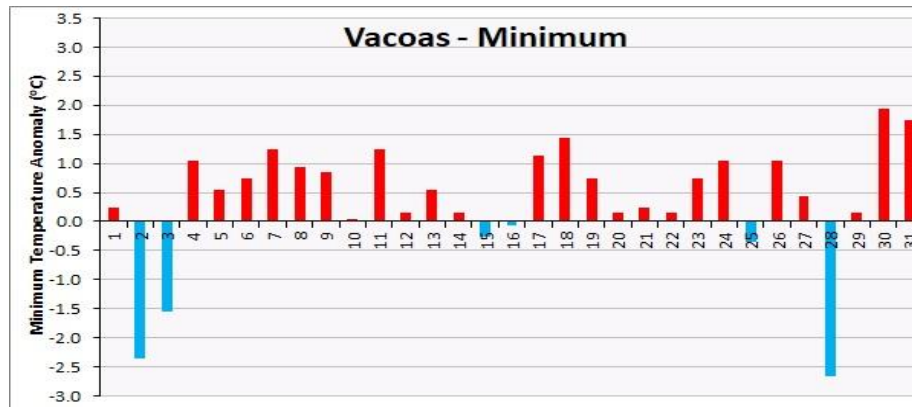
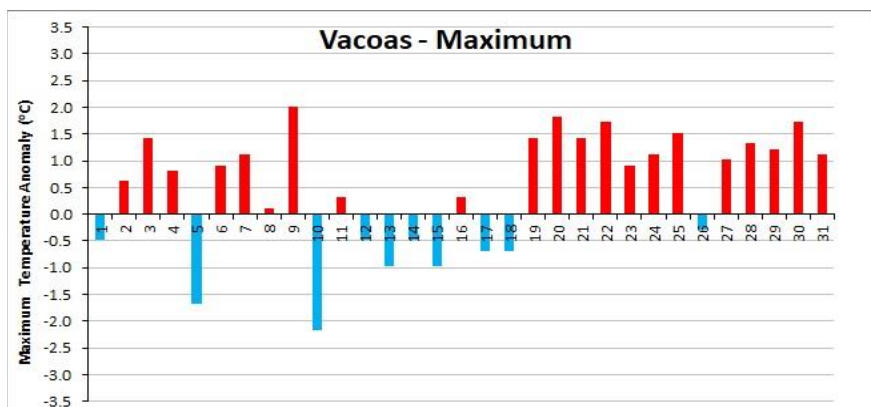
## Cold days





Daytime and night time temperatures were most of the time 0.5 to 1.5 °C warmer both at Plaisance and Vacoas. However, on a few occasions a drop of about 1 to 2 °C in the maximum temperature was noted at both stations especially by the end of the first fortnight.

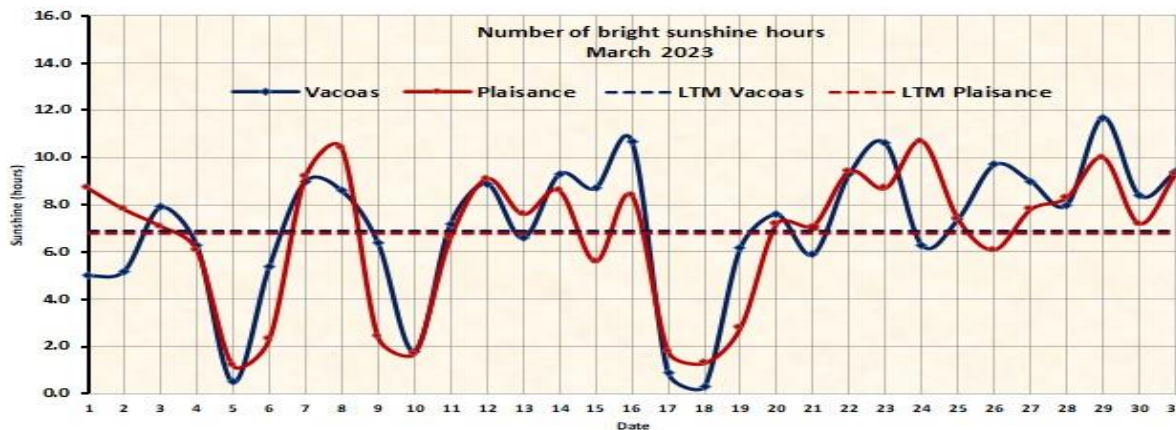
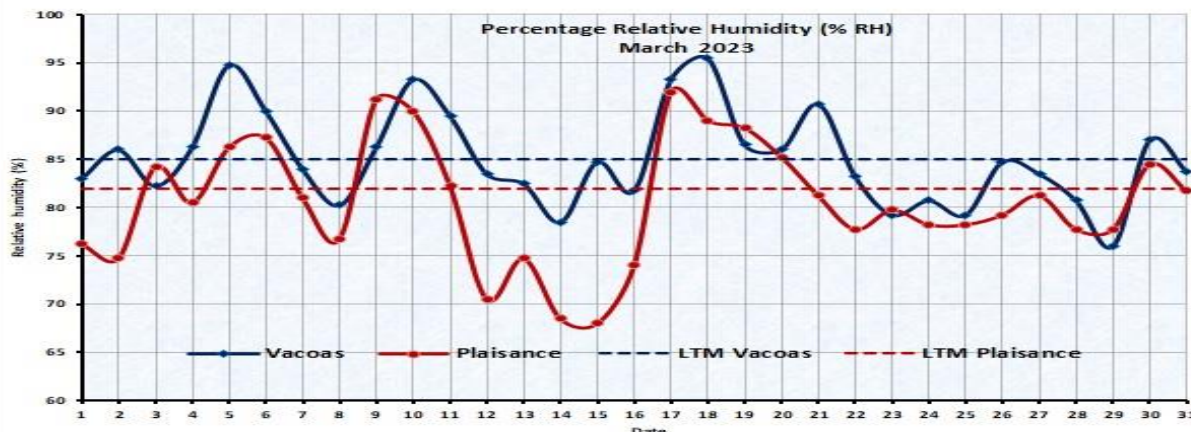
On the other hand, during a few nights, significant drop in minimum temperatures of 1 to 3 °C were observed both at Plaisance and Vacoas especially in the first week and the last week of March 2023.



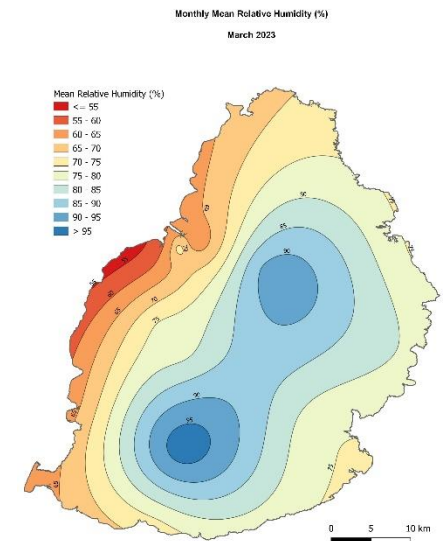
## Sunshine and Humidity

On average the mean relative humidity for the month was close to the normal both at Vacoas and Plaisance. The daily humidity ranged from 76 to 96 % at Vacoas and from 68 to 92 % at Plaisance.

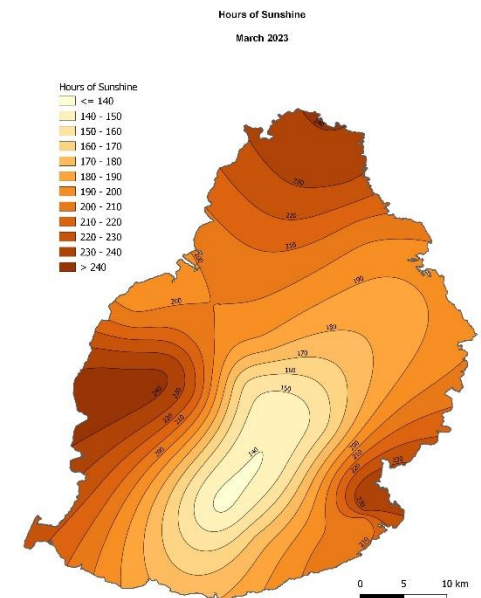
The number of daily bright sunshine hours were 101 % of the normal at Vacoas and 97 % at Plaisance (anomaly of +0.1 and -0.2 at Vacoas and Plaisance respectively). The highest number of sunshine hours at Vacoas was 11.7 (recorded on Day 29) and 10.7 at Plaisance (recorded on Day 24). The lowest number of sunshine hours was 0.3 at Vacoas (recorded on Day 18) and 1.2 at Plaisance (recorded on Day 05). The total number of monthly bright sunshine hours was 218.2 at Vacoas and 207.9 at Plaisance.



## Monthly mean humidity

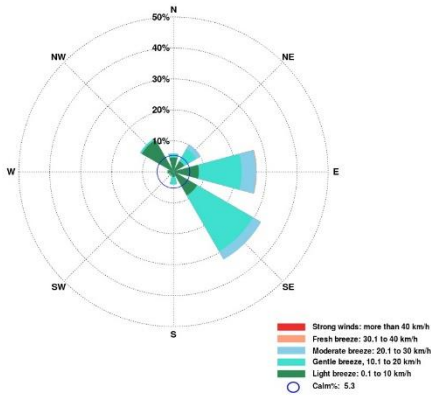


## Monthly total sunshine hours





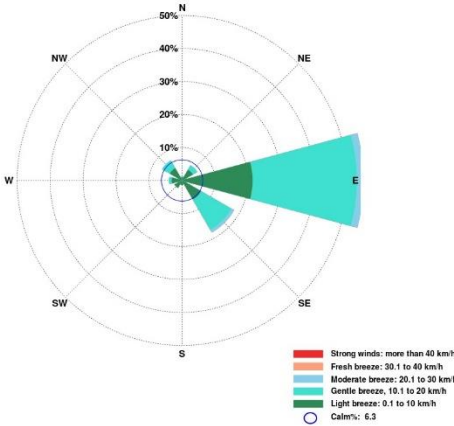
# Winds



Wind frequencies from Plaisance (left) and Vacoas (right) show winds mainly from the south eastern and eastern sectors respectively. Light to moderate winds prevailed most of the time over the island.

The highest gusts recorded over the island were as follows:

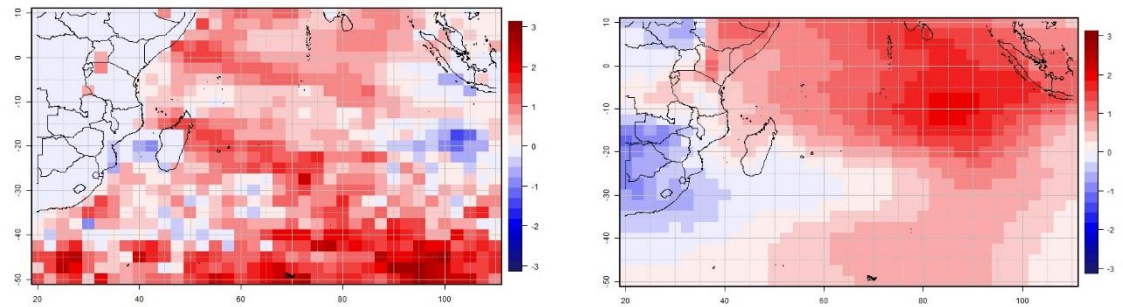
Regions	Highest gusts (km/h)	Date
Champ de Mars	65	14, 15
Dom. les Pailles	65	14
Grand Bassin	61	10
Bois Mangues	61	14
Vacoas	61	10
Plaisance	58	10
Bell Village	55	14
M. L Rouillard	54	14



## FORECAST FOR MAY-JUNE-JULY (MJJ)

El Nino conditions are expected to establish by end of May and to persist till the end of the forecast period. The IOD and SIOD are expected to be in the positive phase.

Sea Surface Temperature (SST) and pressure anomaly are expected to be above normal in the Mascarene region as shown in the SST and pressure anomaly charts respectively.



### Consensus forecast for Mauritius

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

- May: well above normal (~ 200 mm)
- June: below normal (~ 90 mm)
- July: normal (~ 125 mm)

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

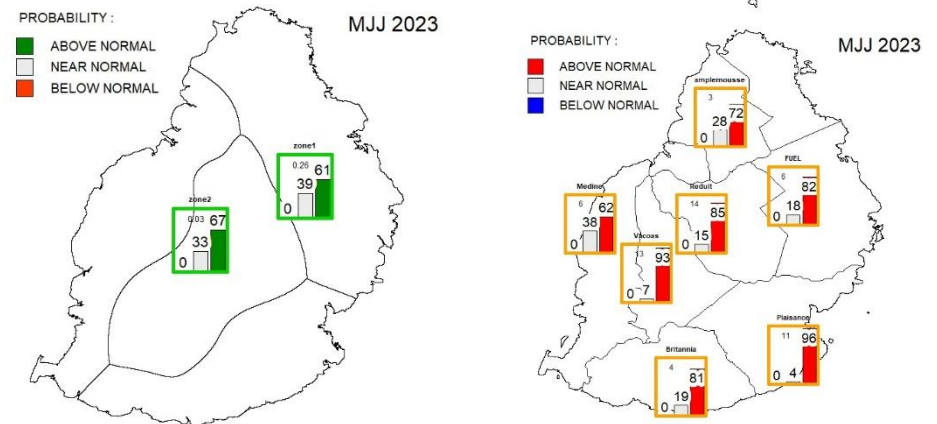
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Updated on: 24 May 2023



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