



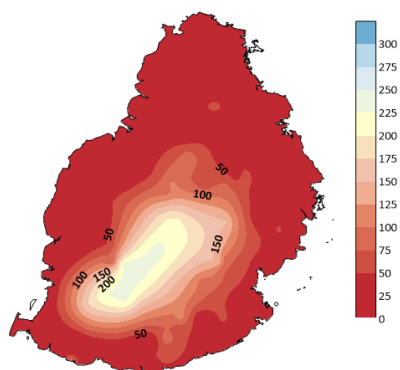
MAURITIUS METEOROLOGICAL SERVICES

CLIMATE SEPTEMBER 2022

Introduction

September 2022 was slightly deficient in rainfall. Temperature was close to normal except for some occasional warm days and cool nights. La-Nina conditions persisted during the month. The Indian Ocean Dipole (IOD) was in the negative phase while the Subtropical Indian Ocean Dipole (SIOD) was neutral. The Madden Julian Oscillation (MJO) was weak in the Indian Ocean during the month.

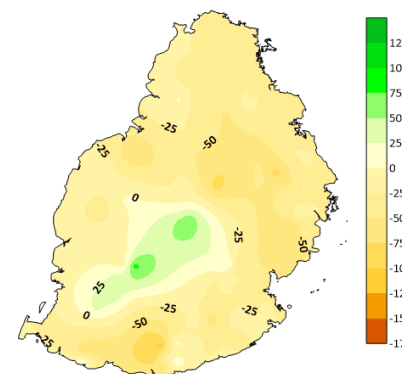
Monthly rainfall



Rainfall

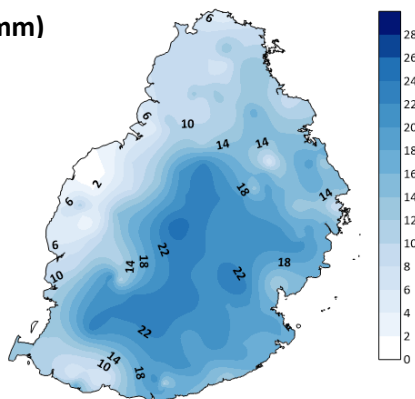
September 2022 had slightly below normal rainfall amounting to 72 mm, representing 85 % of the long-term mean. Rainfall was concentrated over the Central Plateau whereas it was rather dry elsewhere. About one quarter of the rainfall amount was recorded in the first fortnight and the remaining in the second fortnight. Rainfall was deficient almost over the whole island by 25 to 100mm, except over the central plateau where locally it was above by 25 to 75 mm.

Monthly rainfall Anomaly



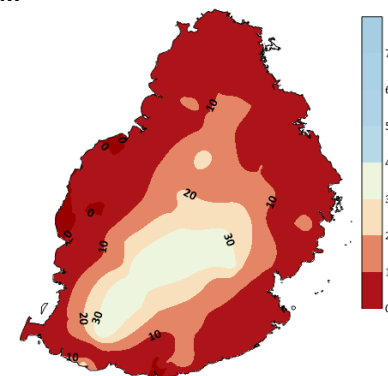
The highest cumulative rainfall for the month was 235.4 mm recorded at Mon Bois.

Rainfall days (> 1 mm)



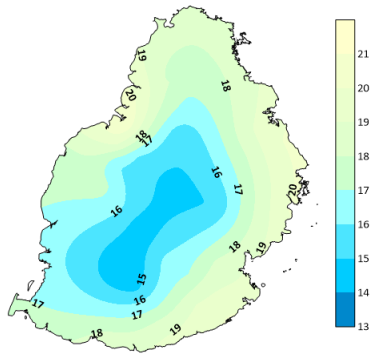
The highest number of rainy days (≥ 1 mm) was observed at Belle Rive with 26 rainy days, but it was mostly light rain. The extreme west, the south west and the north of the island recorded very few rainy days.

Highest 24-hour Rainfall



Highest 24-hour rainfall was 40.0 mm recorded at Val Riche on 20 September 2022.

Minimum Temperature



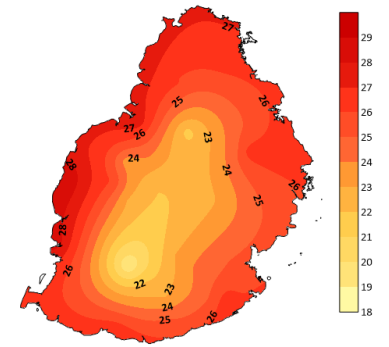
Temperature

The mean temperature over the island was close to normal ($-0.09\text{ }^{\circ}\text{C}$ cooler than the LTM of 1991-2020). The mean minimum temperature was $-0.3\text{ }^{\circ}\text{C}$ cooler than the normal whereas the mean maximum temperature was $0.1\text{ }^{\circ}\text{C}$ warmer.

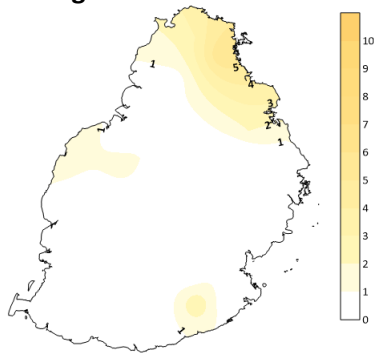
The highest maximum recorded was $30.5\text{ }^{\circ}\text{C}$ at Riviere Noire Day 19. The lowest maximum temperature recorded was $17.0\text{ }^{\circ}\text{C}$ at Grand Bassin on Day 05.

The highest minimum was $22.8\text{ }^{\circ}\text{C}$ at Port Louis on Day 22 and the lowest minimum was $12.7\text{ }^{\circ}\text{C}$ at Pamplemousses recorded on Day 01.

Maximum Temperature



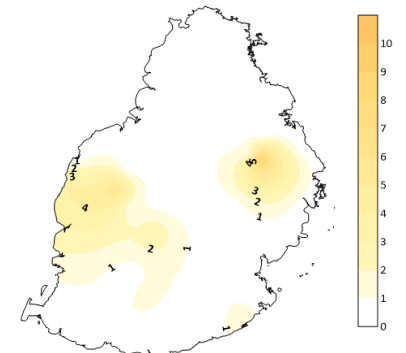
Warm nights



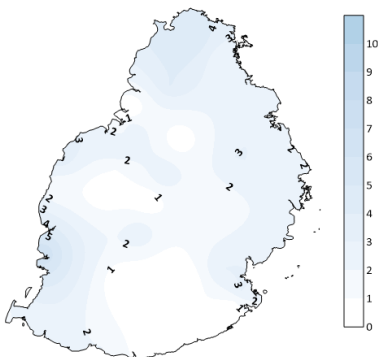
Very few warm nights and warm days were observed over the island during the month.

The highest number of warm nights was 06 at Digue Seche and the highest number of warm days was 09 at Queen Victoria

Warm days



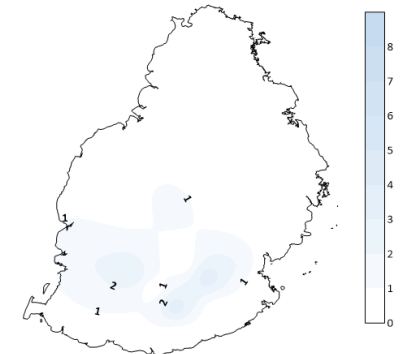
Cold nights

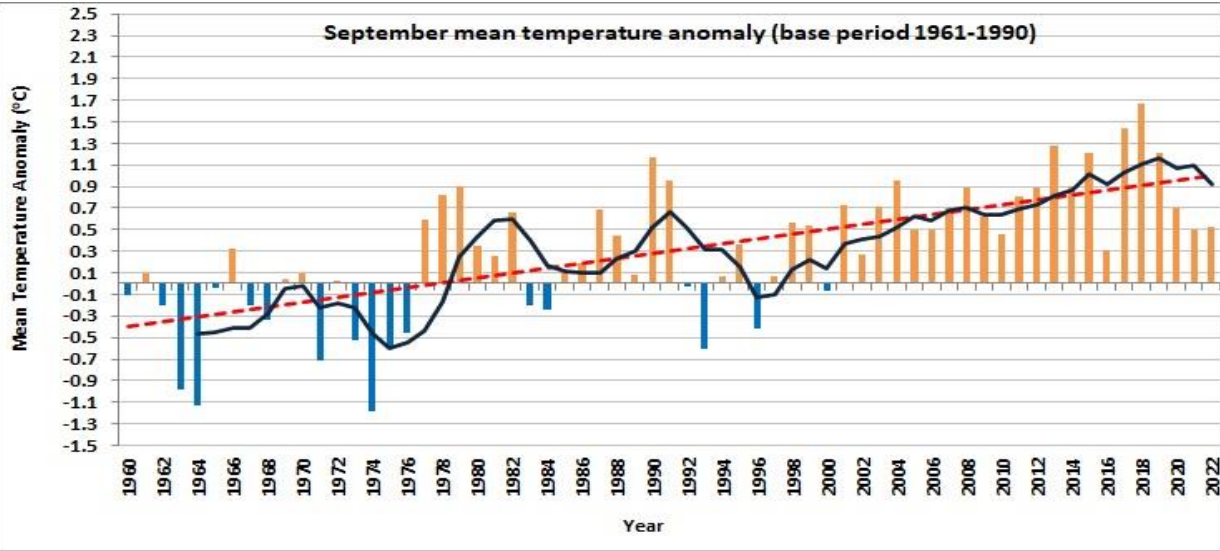


Cooler nights were mostly observed to the north and over the eastern and western coastal areas. The highest number of cold nights recorded was 07 at Pamplemousses. Elsewhere it was less than 07.

There were Very few cold days and it was particularly observed to the south and part of Central Plateau. The highest number of cold days was 04 at Britannia and Rose Belle.

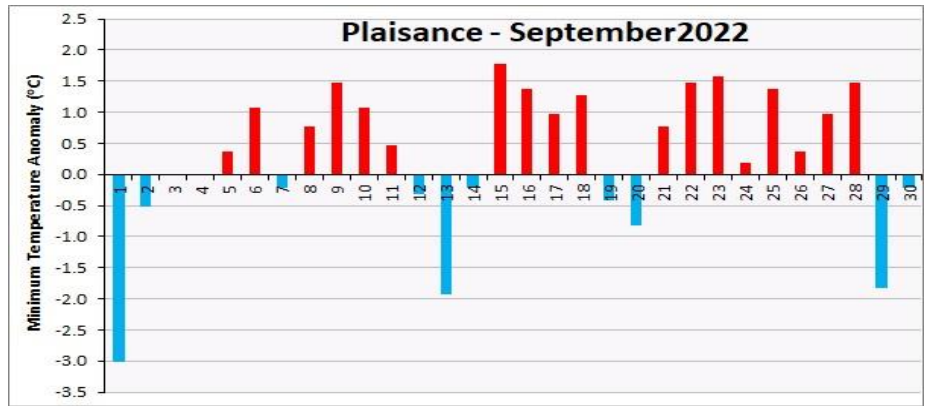
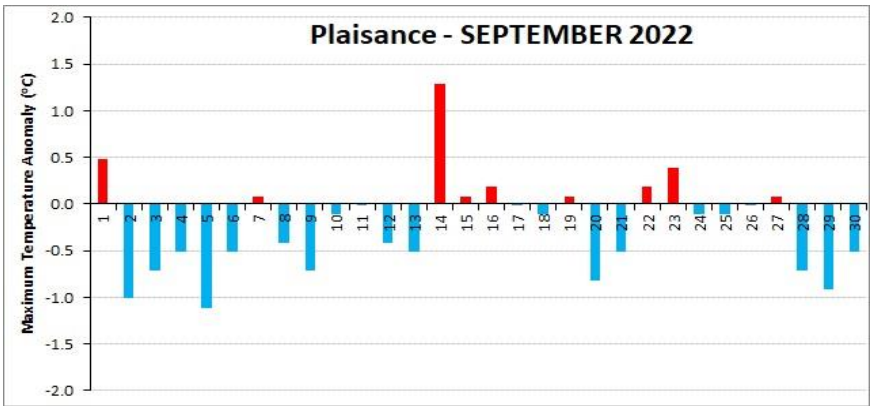
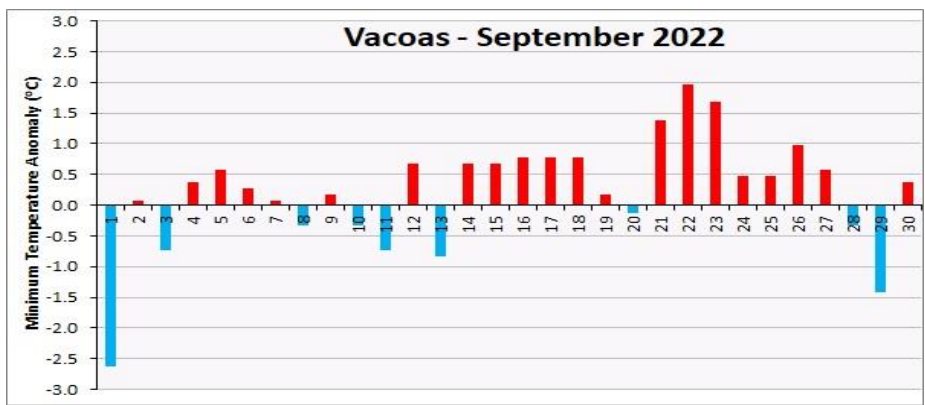
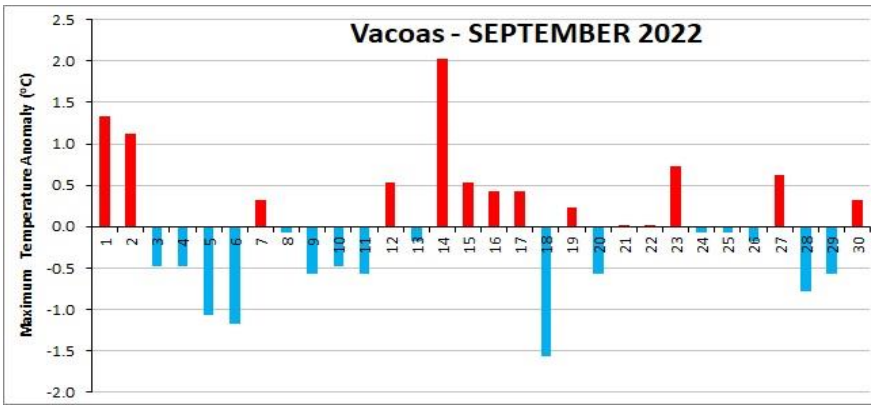
Cold days





At Plaisance the days were on the cooler side most of the time while at Vacoas cold and warm days were equally distributed.

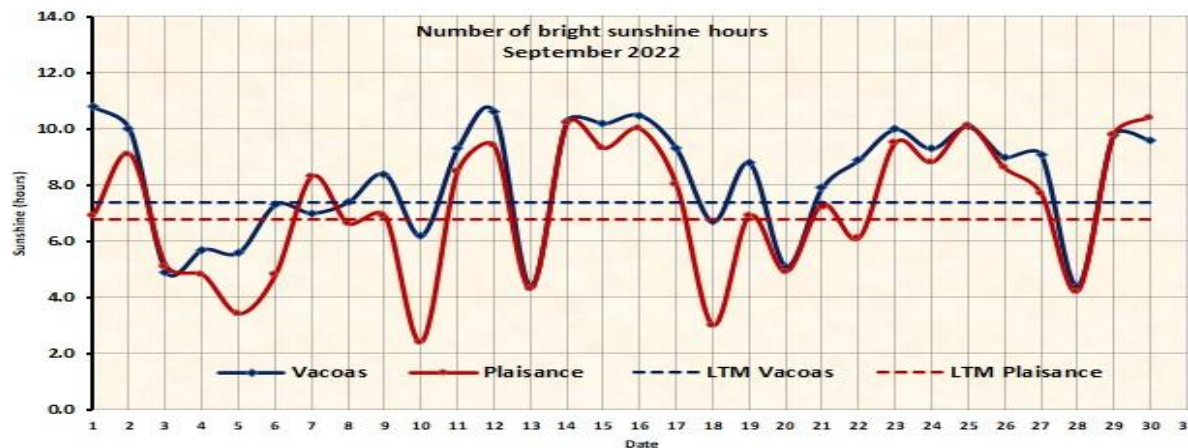
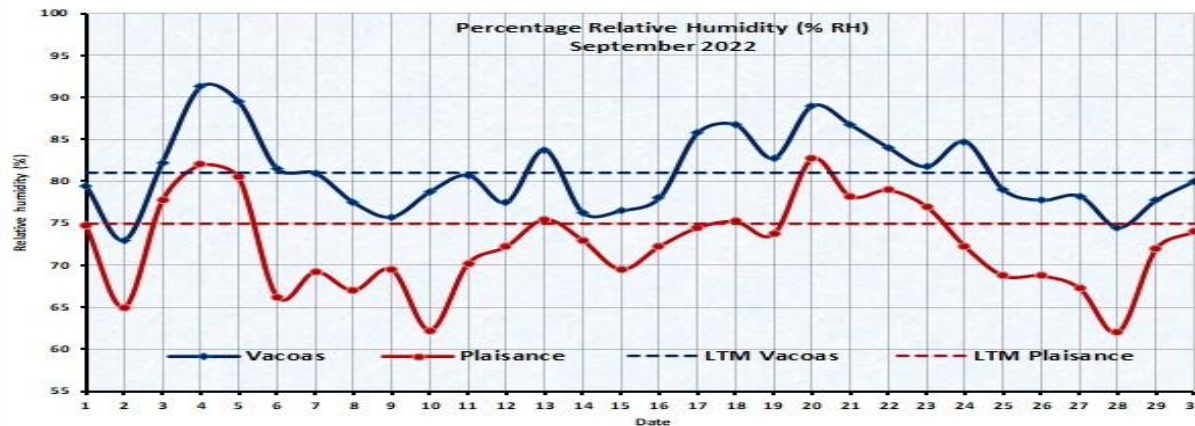
Minimum temperatures were 0.5 to 1°C warmer both at Vacoas and Plaisance especially during the second fortnight. However, on the first day of the month a notable drop in the minimum temperatures of more than 2.5°C was recorded at both stations.



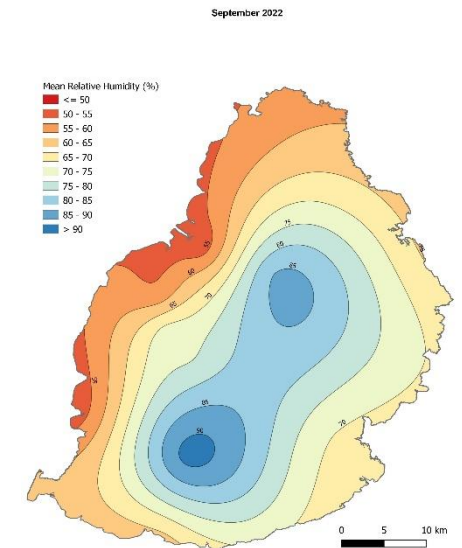
Sunshine and Humidity

The mean relative humidity for the month was close to the normal at both at Vacoas and Plaisance. The daily humidity ranged from 73 to 91% at Vacoas and from 62 to 83 % at Plaisance. Due to the presence of cold and dry air from the south of the Mascarenes, a decrease in humidity was observed during the second and last week of the month.

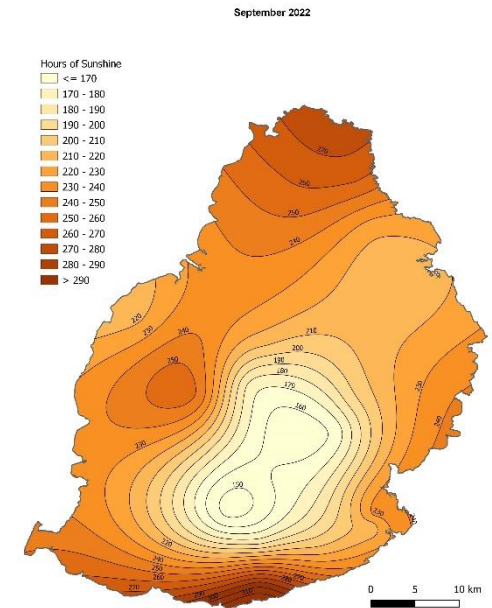
The number of daily bright sunshine hours were 111 % of the normal at Vacoas and 106 % at Plaisance (anomaly of +0.8 at Vacoas and +0.4 at Plaisance). The highest number of sunshine hours at Vacoas was 10.8 (recorded on Day 01) and 10.4 at Plaisance (recorded on Day 30). The lowest number of sunshine hours was 4.47 at Vacoas (recorded on Day 13 and Day 28) and 2.4 at Plaisance (recorded on Day 10). The total number of monthly bright sunshine hours was 246.6 at Vacoas and 215.3 at Plaisance.



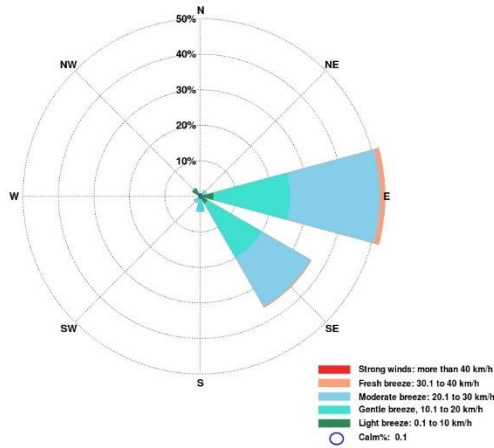
Monthly mean humidity



Monthly total sunshine hours



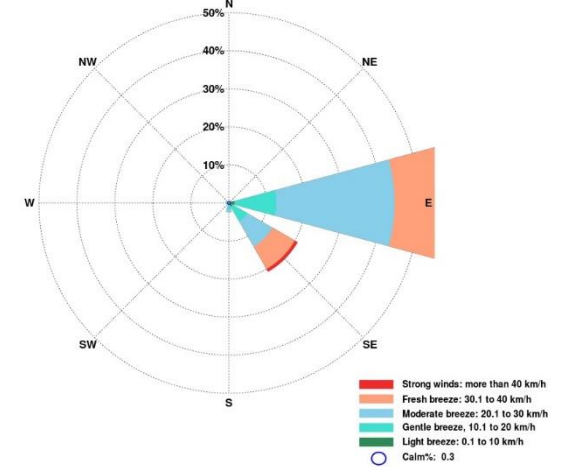
Winds



Wind frequencies from Plaisance (left) and Vacoas (right) show winds mainly from the eastern and south eastern sectors. Light to moderate winds prevailed most of the time over the island. Nevertheless, on a few occasions, both Plaisance and Vacoas recorded fresh winds from the eastern and south eastern sectors.

The highest gusts recorded over the island were as follows:

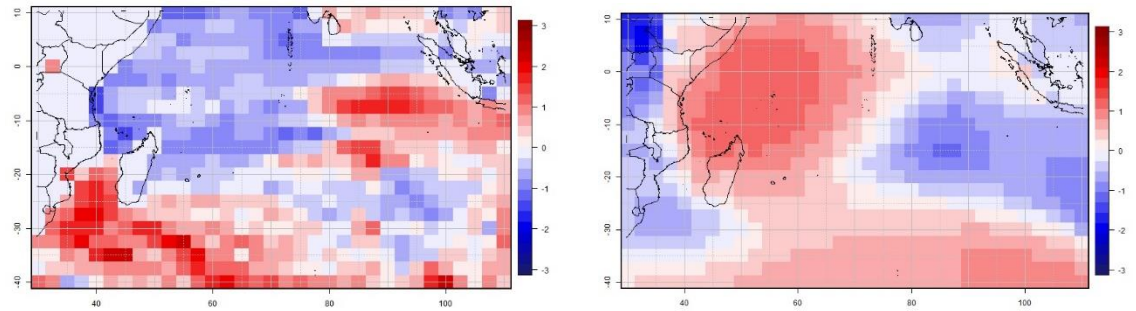
Regions	Highest gusts (km/h)	Date
Champ de Mars	90	23
D. L. Pailles	68	Often
R. Noire	65	21
Bell Village	64	21
Le Morne	61	20, 21
N. Decouverte	61	26
M L Rouillard	61	26
Riche Terre	61	22, 23



FORECAST FOR NOVEMBER-DECEMBER-JANUARY (NDJ)

La Nina conditions are expected to persist in the equatorial Pacific Ocean and is expected to normalise by the end of the forecast period. IOD is expected to remain in the negative phase whereas the SIOD will be neutral.

Sea Surface Temperature (SST) is expected to be slightly cooler and pressure anomaly to be close to the 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 NDJ

Consensus forecast for Mauritius

Cumulative rainfall for November to January is expected to be below normal. The monthly rainfall forecast consensus is as follows: -

- November: below normal (~ 55 mm)
- December: below normal (~ 125 mm)
- January 2023: normal (~ 270 mm)

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

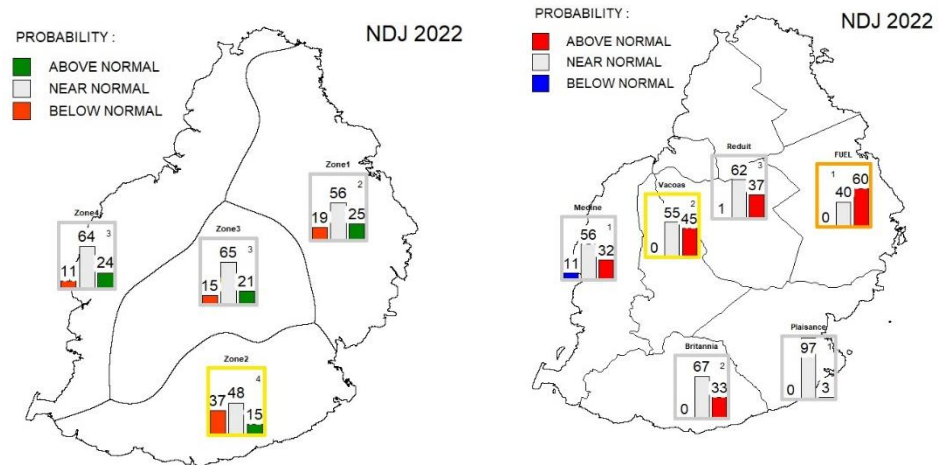
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Statistical Model Forecast of (a) rainfall and (b) temperature for NDJ