



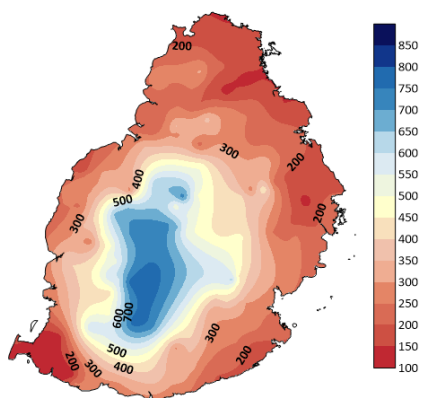
MAURITIUS METEOROLOGICAL SERVICES

CLIMATE FEBRUARY 2022

Introduction

February 2022 was marked by two intense tropical cyclones, namely Batsirai and Emnati, that influenced weather over Mauritius. Episodes of heavy rainfall and cyclonic winds were observed over the island during the passage of these two systems. Weak La-Nina conditions persisted during the month while the Indian Ocean Dipole (IOD) and the Subtropical Indian Ocean Dipole (SIOD) were in the neutral phases. The Madden Julian Oscillation (MJO) evolved mostly over the Indian Ocean.

Monthly rainfall



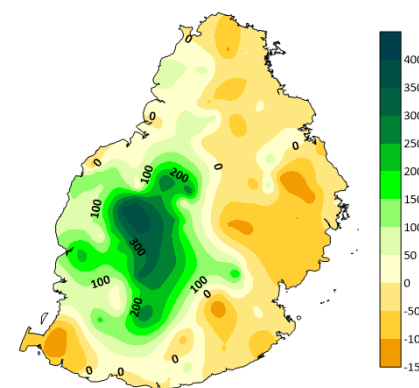
Rainfall

February 2022 received slightly above normal rainfall amounting to 384 mm, representing 119 % of the long term mean for this month. Sixty-three percent (63 %) of the total rainfall was recorded in the first fortnight and 37% in the second half.

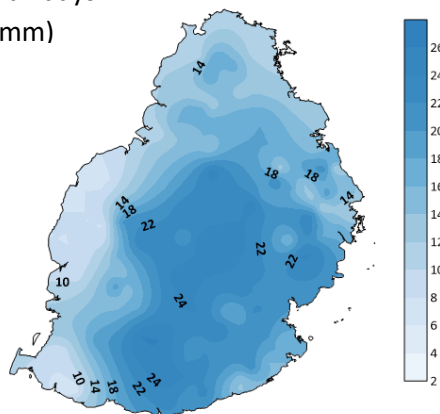
The highest cumulative rainfall for the month was 777.6 mm recorded at Good End.

Excess rainfall of about 250 to 350 mm was observed over the Central Plateau while rainfall was deficient by about 50 to 150 mm mainly over the eastern half of the island and to the extreme south west. In other regions, rainfall was mainly normal.

Monthly rainfall
Anomaly



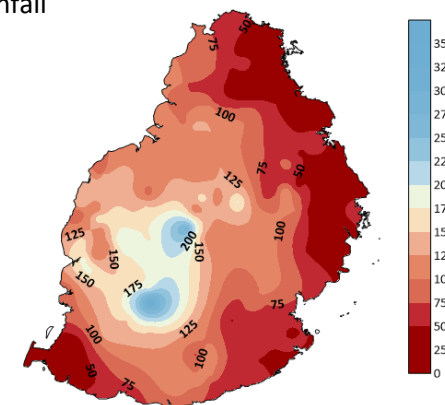
Rainfall days
(> 1 mm)



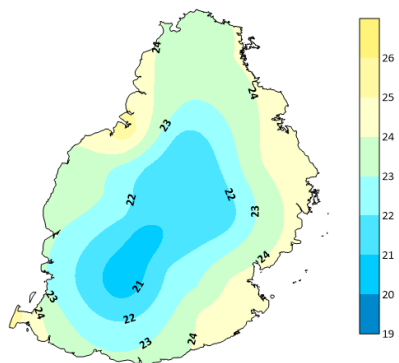
The highest number of rainy days (≥ 1 mm of rain) was observed mainly over the central plateau; 26 rainy days at Bois Cheri and Grand Bassin. Over the other parts of the island, about 7 to 25 rain days were observed.

Highest 24-hour rainfall was 342 mm recorded at Arnaud on 01 February 2022.

Highest 24-hour
Rainfall



Minimum Temperature



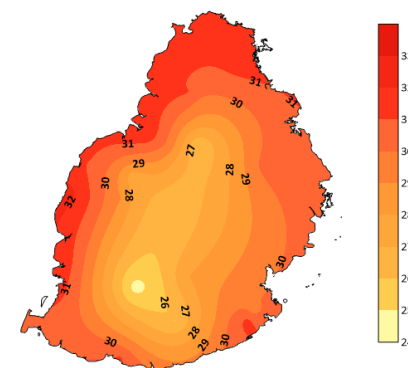
Temperature

The mean temperature over the island was $-0.08\text{ }^{\circ}\text{C}$ cooler to the LTM of 1991-2020. The mean minimum temperature was warmer by $0.1\text{ }^{\circ}\text{C}$ and the mean maximum temperature was cooler by $-0.3\text{ }^{\circ}\text{C}$.

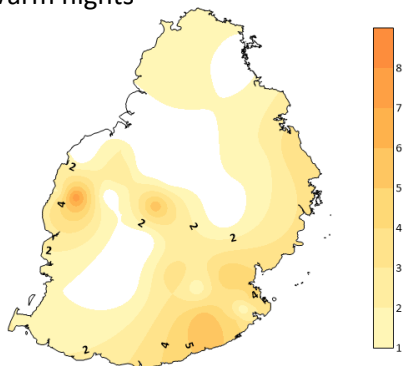
The highest maximum recorded was $35.7\text{ }^{\circ}\text{C}$ at Riviere Noire on Day 14. The lowest maximum temperature recorded was $22.2\text{ }^{\circ}\text{C}$ at Grand Bassin on Day 16.

The highest minimum was $27.7\text{ }^{\circ}\text{C}$ at Le Morne on Day 4. The lowest minimum was $18\text{ }^{\circ}\text{C}$ at Alma recorded on Day 10 and Day 11.

Maximum Temperature



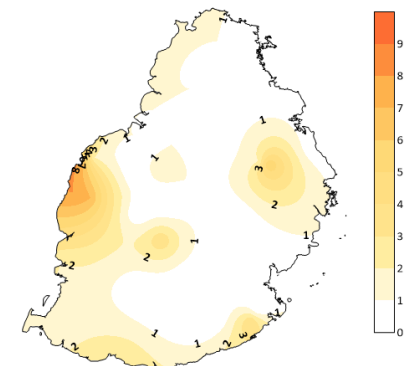
Warm nights



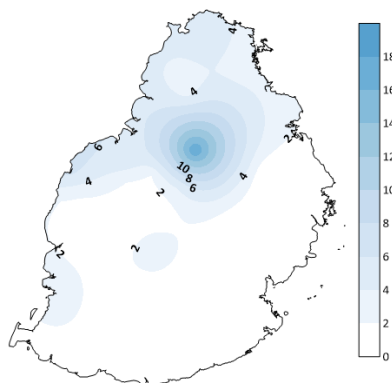
Few warm nights were observed particularly to the west, the south east and locally over the central plateau; 8 warm nights at Beau Songes and 6 warm nights at Rose Belle and Belle Rive.

The maximum number of warm days recorded was in the west with 8 warm days at Albion and Medine.

Warm days



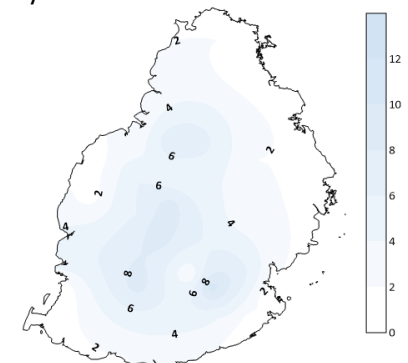
Cold nights

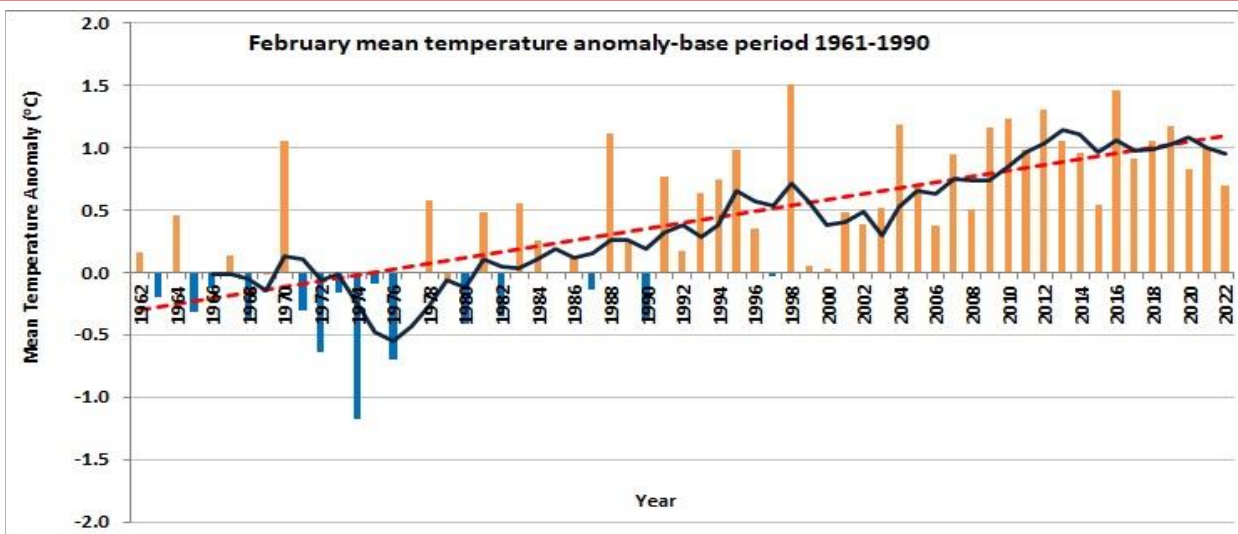


Cold nights were observed mainly over the northern part of the island and locally over the central plateau. Nouvelle Decouverte recorded 18 cold nights and it varied between 4 to 8 in the north.

Cold days were observed across the island on few occasions. The highest number of cold days was 11 at Rose Belle and 9 at Belle Rive, Grand Bassin and Mon Bois. In other regions number of cold days varied between 2 to 7.

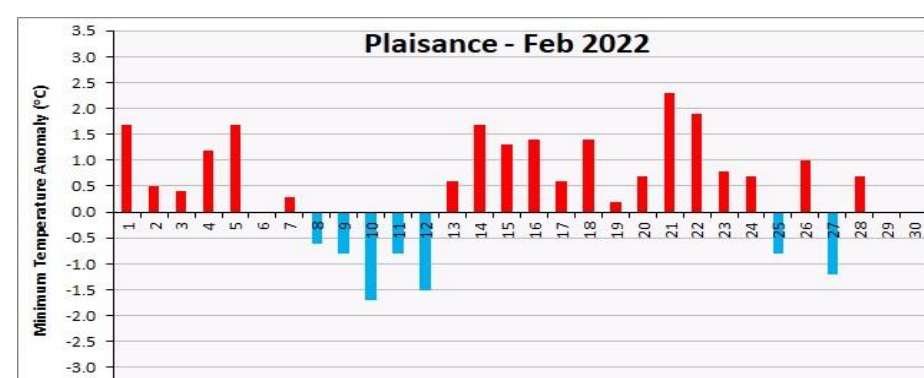
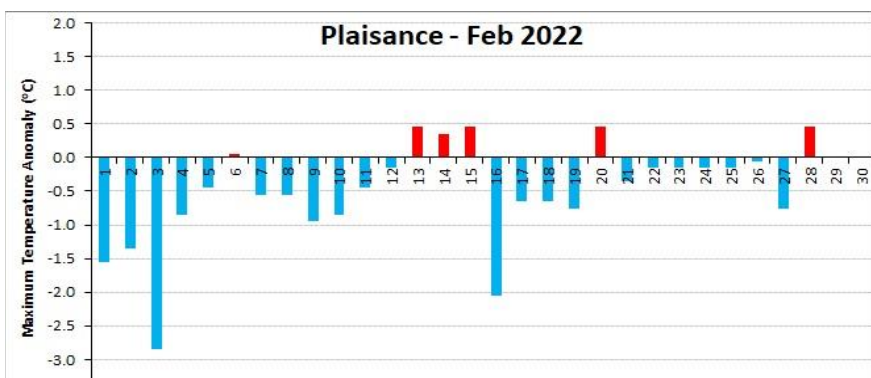
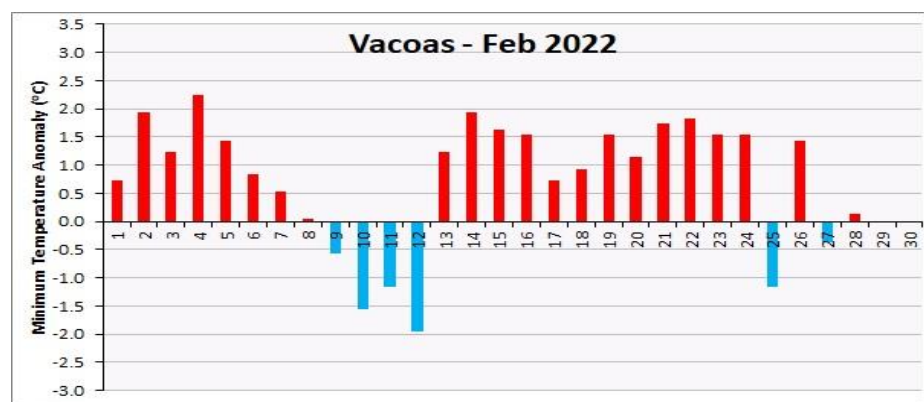
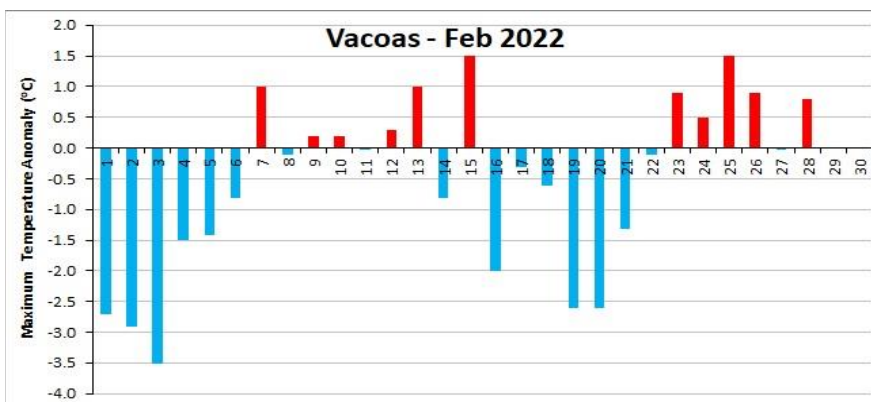
Cold days





Persistent cloudiness made the daytime temperatures cooler than nights both at Vacoas and Plaisance. Over the high grounds, on several occasions the maximum temperature was below the seasonal mean by 2 to 3 °C while over the coastal regions the drop was about 1 to 2 °C.

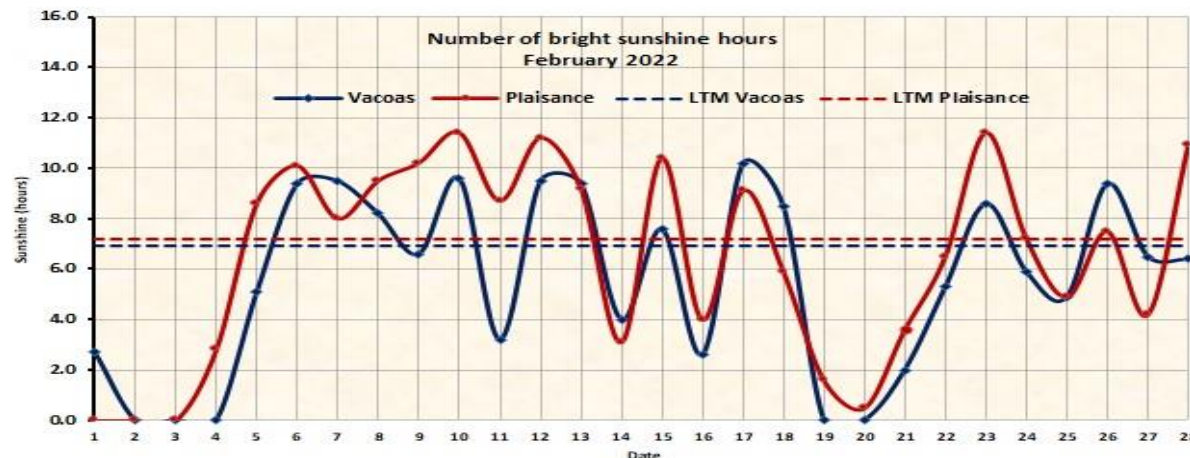
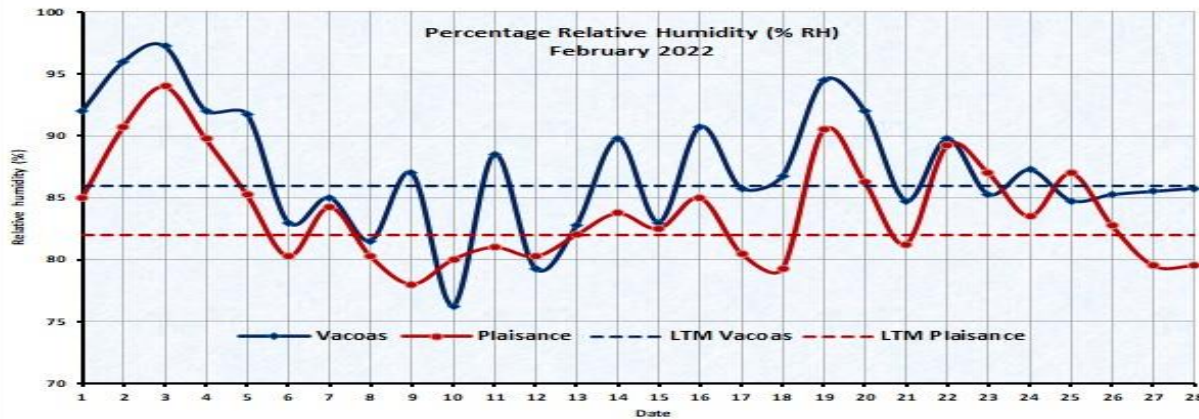
Night temperatures were on several occasions above the normal by 1 to 2 °C both at Vacoas and Plaisance. Interestingly the nights were warmer over the central plateau than over the coastal regions.



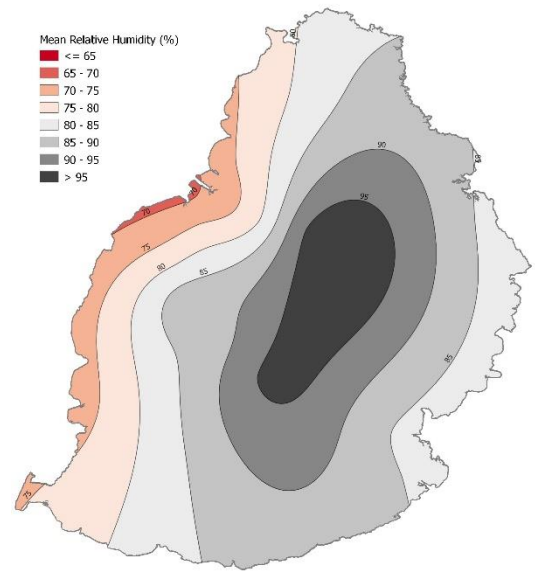
Sunshine and Humidity

The mean relative humidity was close to normal at both stations. The daily humidity ranged from 76 to 97% at Vacoas and from 78 to 94% at Plaisance. The start of the first week and the end of the third week had a notable increase in humidity and rainfall due to the passage of Intense Tropical Cyclone Batsirai and Emnati respectively. This explains the drop in the number of bright sunshine hours during that period.

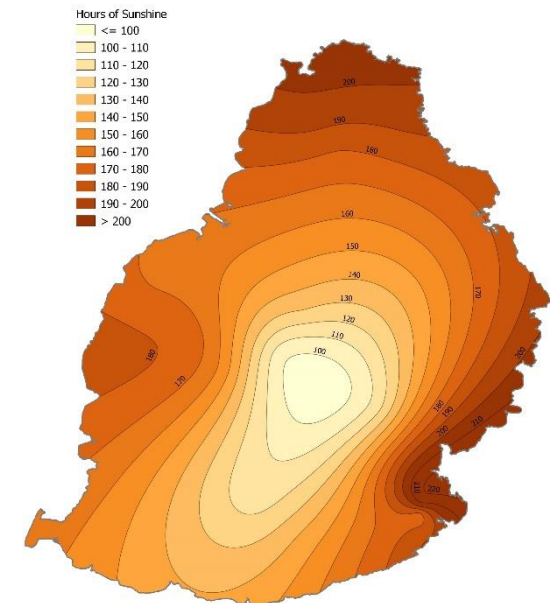
The number of daily bright sunshine hours were 80 percent of the normal at Vacoas and 90 percent at Plaisance (anomaly was -1.4 and -0.8 respectively). The highest number of sunshine hours was 11.4 recorded on Day 10 and Day 23 at Plaisance. The lowest number of sunshine hours was 0.0 at Plaisance and Vacoas, recorded during the passage of Batsirai and Emnati.



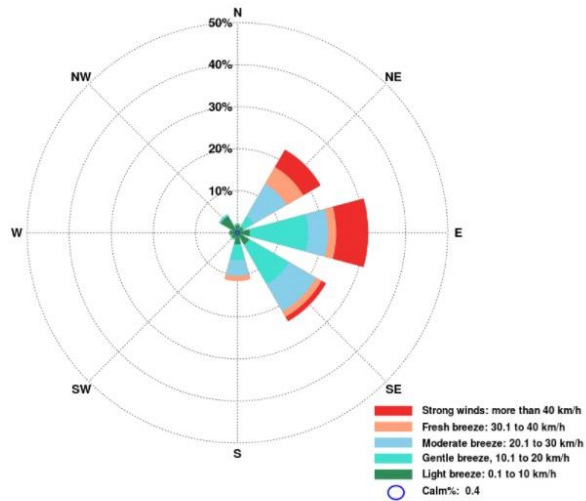
Monthly mean humidity



Monthly total sunshine hours

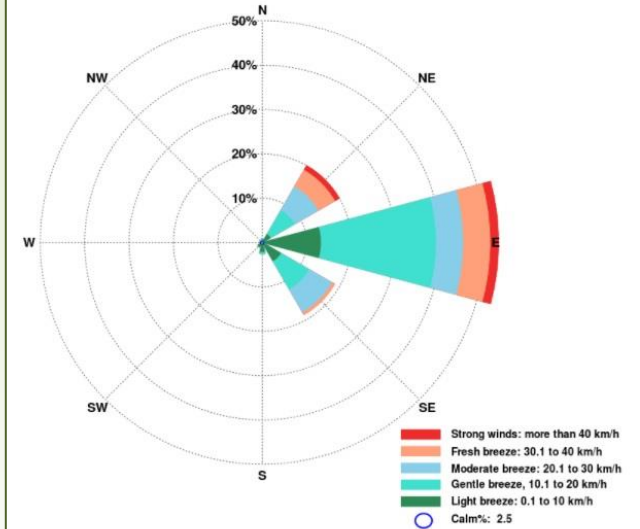


Winds



Wind frequencies from Plaisance (left) and Vacoas (right) show winds mainly from the eastern sector. On other instances, the wind blew from the north east and the south east. Light to moderate winds prevailed most of the time over the island. Nevertheless, during the passage of Intense Tropical Cyclones Batsirai and Emnati to the north of Mauritius, cyclonic gusts were recorded at several places over the island. The highest gusts were as follows:

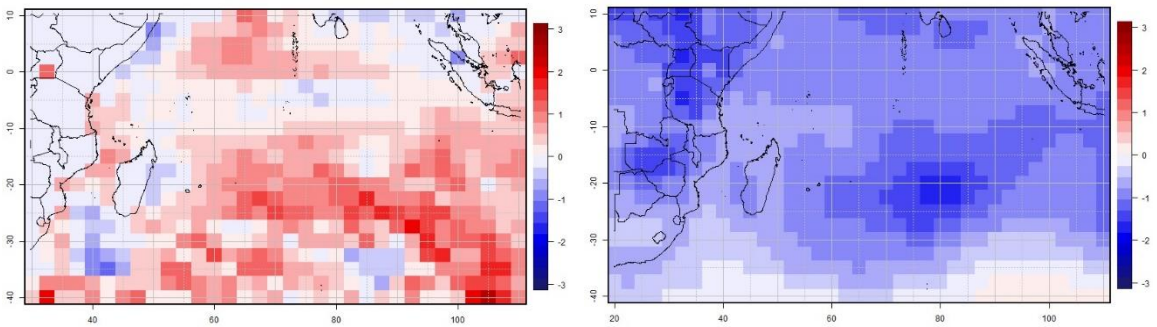
Regions	Highest gusts (km/h)	Date
D. L. Pailles	155	2
Champ de Mars	151	2
N. Decouverte	122	19
Le Morne	119	19
Beaux Songes	108	3
Grand Bassin	108	1
R. Noire	108	1
Bell Village	108	2
Albion	101	3
Riche Terre	100	2



FORECAST FOR APRIL-MAY-JUNE

Weak La Nina conditions are expected to persist in the equatorial Pacific Ocean gradually transiting to neutral ENSO conditions by the end of the forecast period. IOD will remain neutral at first and gradually migrate to the weak negative phase by June while SIOD is expected to remain neutral.

SST will be slightly above the normal while pressure anomaly will be normal to slightly below in the Mascarene region as shown in the SST and pressure anomaly charts respectively.



(a) Sea surface temperature and (b) pressure anomaly charts for AMJ 2022

Consensus forecast for Mauritius

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

- April: above normal (~ 250 mm)
- May: normal (~ 140 mm)
- June: normal (~ 110 mm)

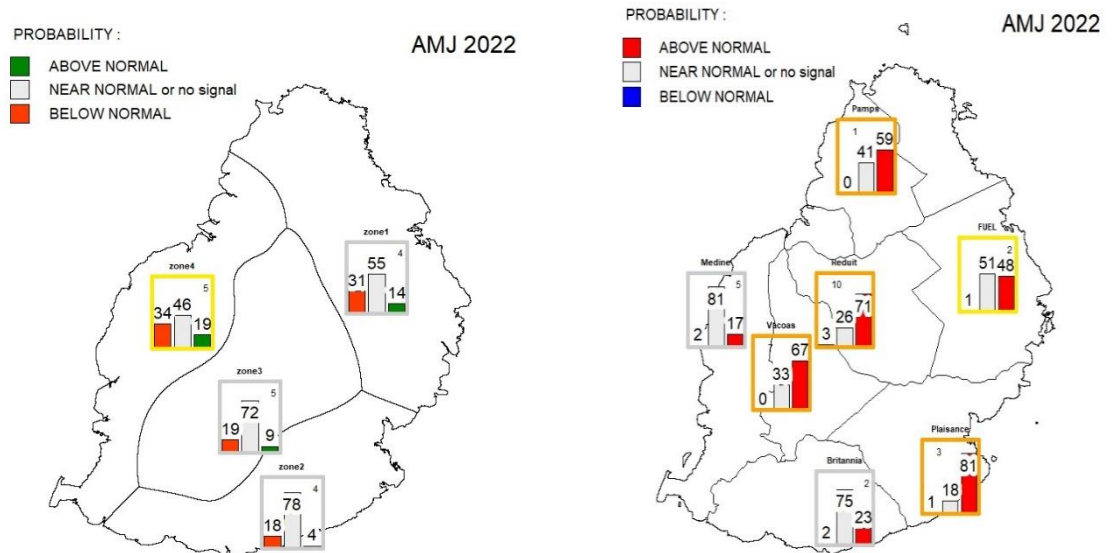
Mean temperature is forecasted to be normal to slightly above normal.

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Statistical Model Forecast of (a) rainfall and (b) temperature for AMJ 2022