



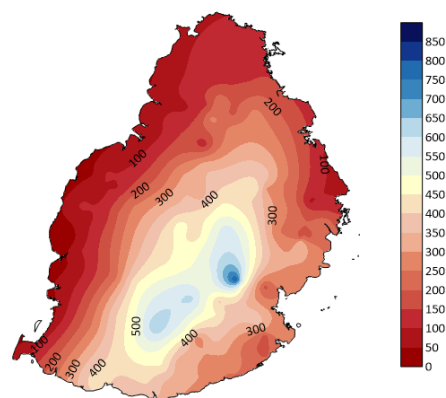
MAURITIUS METEOROLOGICAL SERVICES

CLIMATE JANUARY 2022

Introduction

January 2022 saw the formation of the season's first storm, Moderate Tropical Storm Ana (formed on 20 January 2022), making it the most delayed onset of cyclone season in the South West Indian Ocean. 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 and weak negative phases respectively. The Madden Julian Oscillation (MJO) evolved mostly over the Western Pacific Ocean.

Monthly rainfall



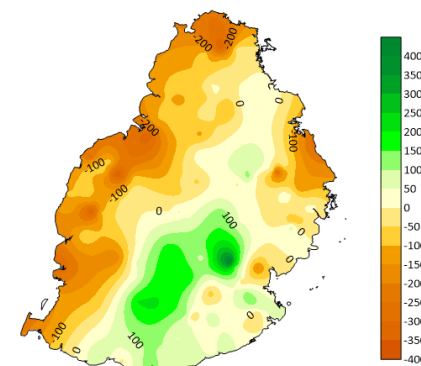
Rainfall

January 2022 had normal rainfall with 291 mm of rain, representing 103 % of the long-term mean for the month. 70% of the total rainfall was recorded in the first fortnight and 30% in the second half.

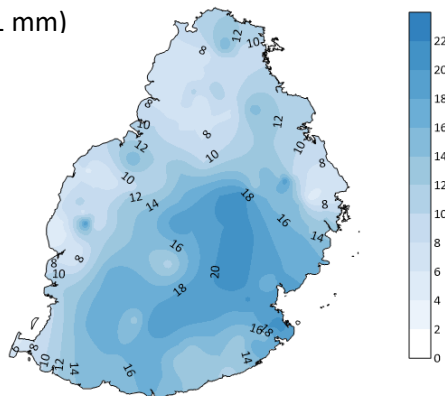
The highest cumulative rainfall for the month was 803.2 mm recorded at Cent Gaulettes.

Excess rainfall of above 150 mm was observed over the Central Plateau while rainfall was deficient by about 100 to 200 mm over the western, northern and local to the extreme eastern parts of the island. In other regions, rainfall was mainly normal.

Monthly rainfall Anomaly



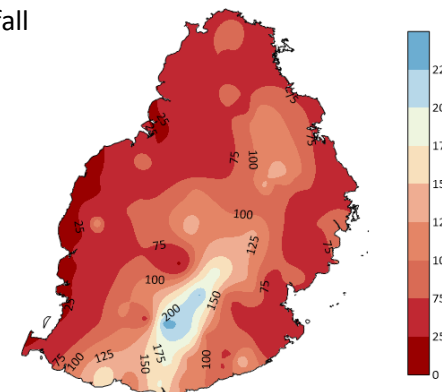
Rainfall days (> 1 mm)



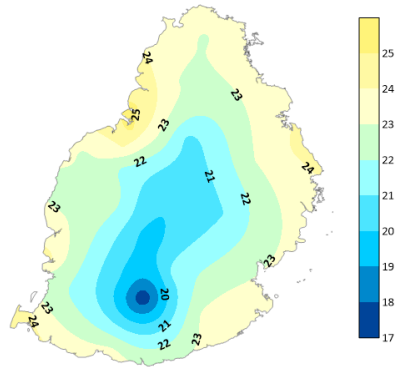
The highest number of rainy days (≥ 1 mm of rain) was observed to the south east of the island; 22 rainy days at Cent Gaulettes. Over the other parts of the island, about 8 to 20 rain days were observed.

Highest 24-hour rainfall was 235.2 mm recorded at Bois Cheri on 11 January 2022.

Highest 24-hour Rainfall



Minimum Temperature



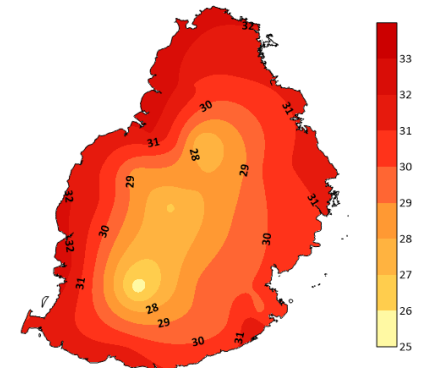
Temperature

Compared to LTM 1991-2020, the mean temperature over the island was close to the normal (Anomaly of $-0.14\text{ }^{\circ}\text{C}$). The mean minimum temperature was cooler by $-0.3\text{ }^{\circ}\text{C}$ and maximum temperatures were close to the normal ($+0.0\text{ }^{\circ}\text{C}$).

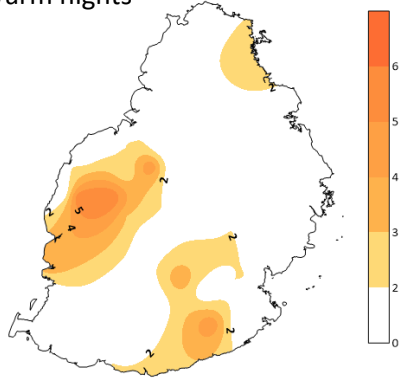
The highest maximum recorded was $35.7\text{ }^{\circ}\text{C}$ at Riviere Noire on Day 22. The lowest maximum temperature recorded was $21.9\text{ }^{\circ}\text{C}$ at Grand Bassin on Day 11.

The highest minimum was $28\text{ }^{\circ}\text{C}$ at Port Louis on Day 22. The lowest minimum was $13.6\text{ }^{\circ}\text{C}$ at Bois Cheri on Day 27. This is the extreme minimum temperature on record for this station for the month of January

Maximum Temperature



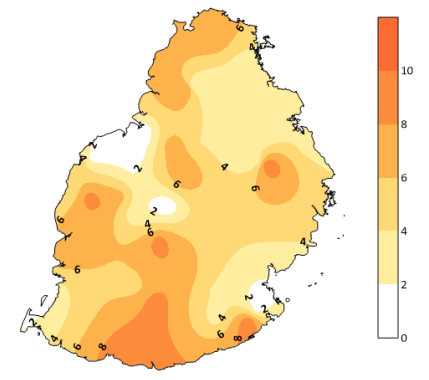
Warm nights



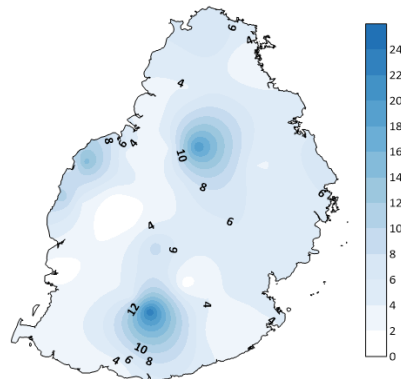
Few warm nights were observed particularly to the west, the south and locally to the north east; 6 warm nights at Beau Songes and Quatre Bornes.

Warm days were observed across the island on some occasions. The maximum number of warm days was 10 at Queen Victoria and St Felix.

Warm days



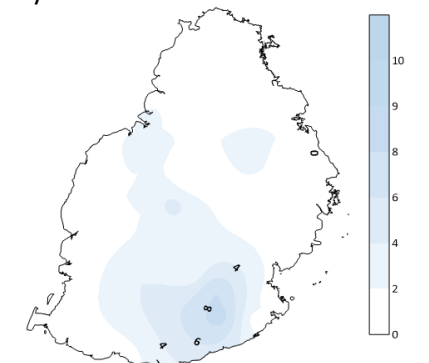
Cold nights

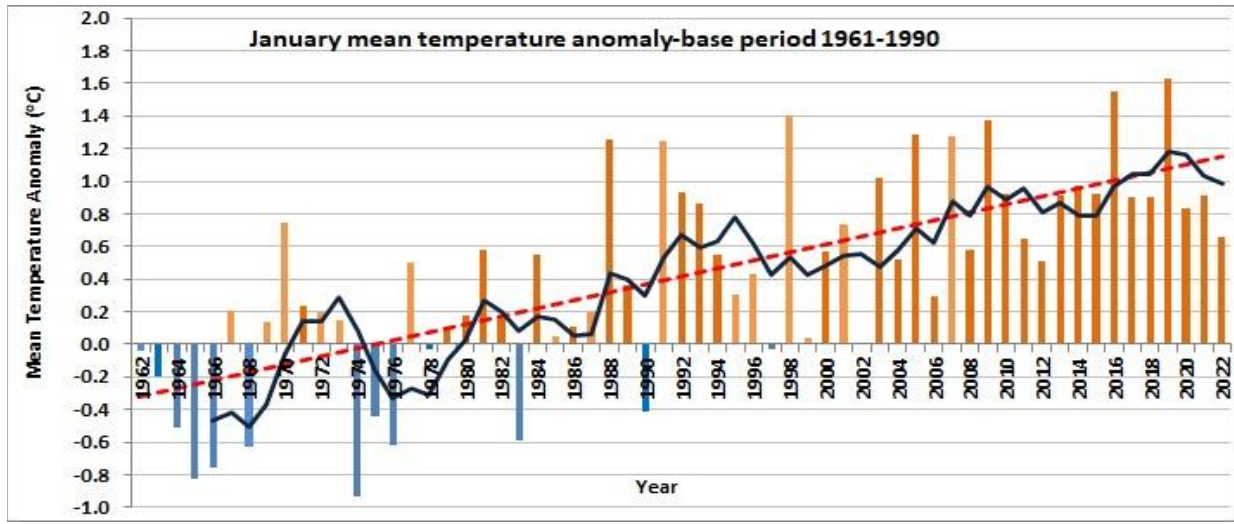


Cold nights were observed across the island on several occasions. Most of them were recorded over the Central Plateau and locally to the west. Twenty-four (24) cold nights were recorded at Bois Cheri, 20 at Nouvelle Decouverte and 15 at Gros Cailloux.

Few cold days were observed during the month; mainly to the south of the island; 9 at La Baraque, 8 at Rose Belle and 5 at Bois Cheri.

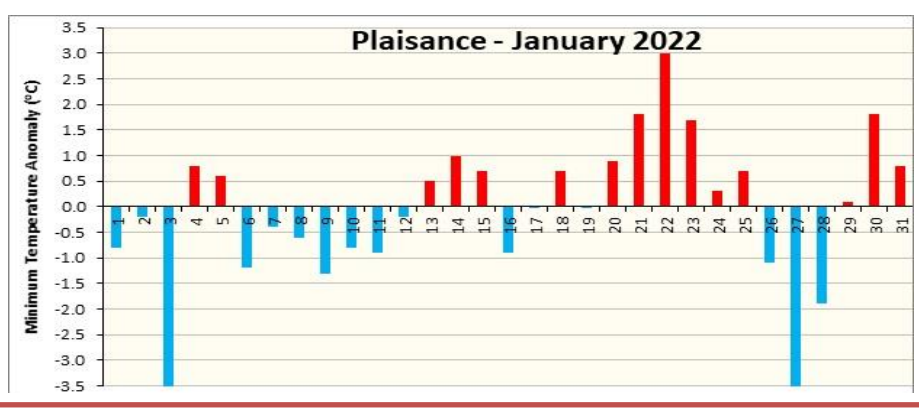
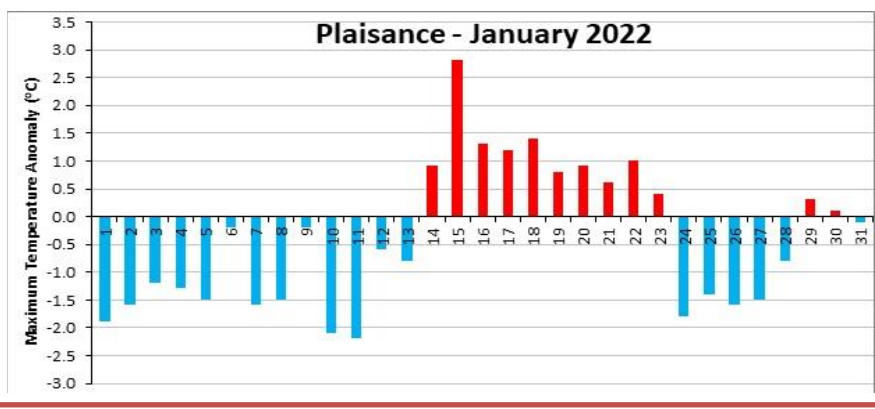
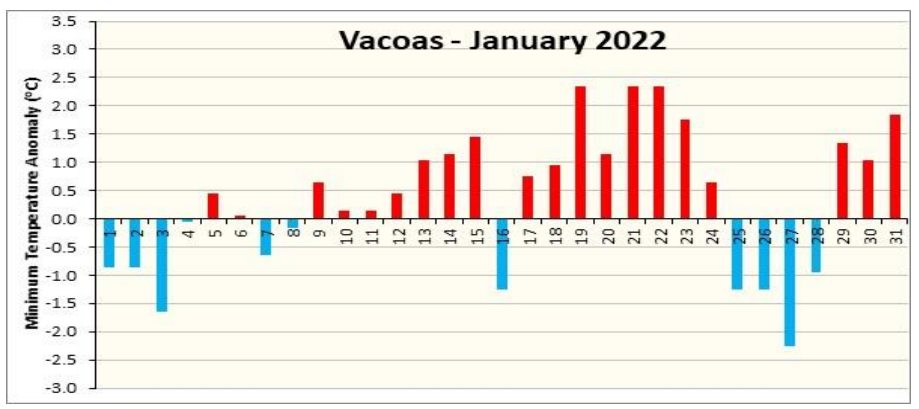
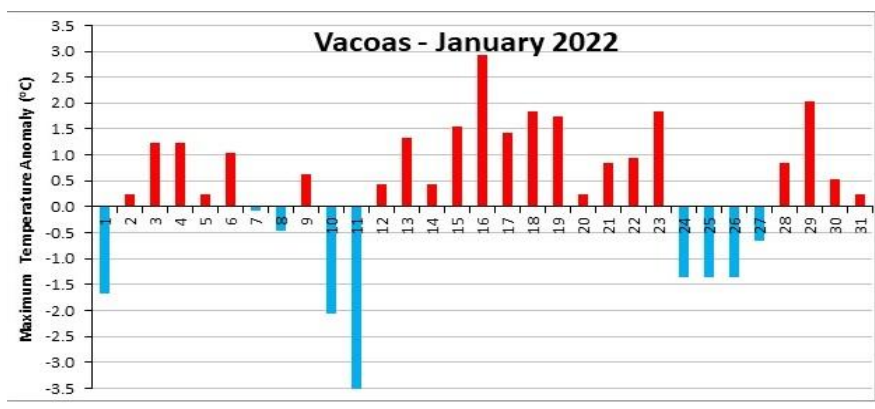
Cold days





Daytime temperatures were exceptionally cooler to the south than over the Central Plateau during the first fortnight due to persistent cloudiness. However, maximum temperatures were 1-2 °C warmer both at Vacoas and Plaisance during the third week. In the last week cold dry air invaded the island with drop in temperatures and humidity.

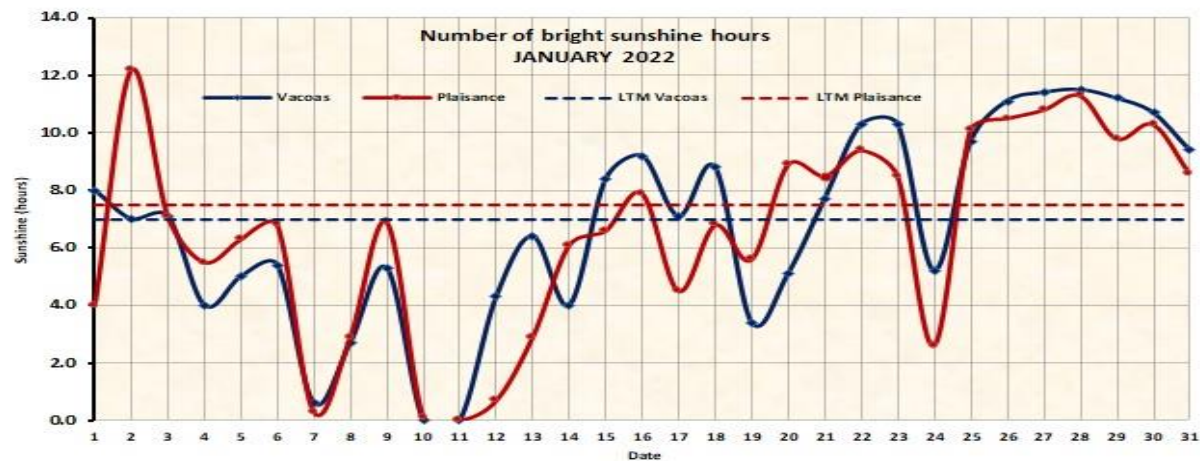
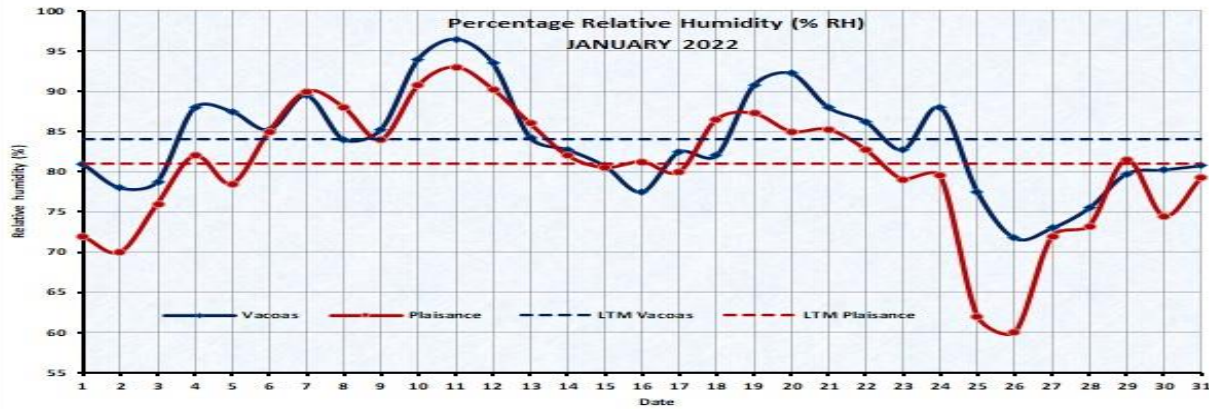
Night temperatures were on several occasions below the normal both at Vacoas and Plaisance especially at the start and end of the month. However, during the second fortnight, the minimum temperature was 1-2 °C warmer than normal at both stations.



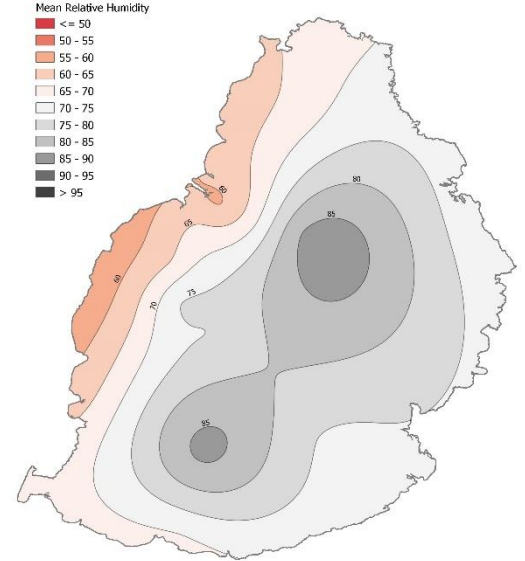
Sunshine and Humidity

The mean relative humidity was close to normal at both stations. The daily humidity ranged from 72 to 97% at Vacoas and from 60 to 93 % at Plaisance. The last week had a notable drop in humidity due to cold dry air invasion. This led to bright sunny days explaining the persistent increase in bright sunshine hours during that period.

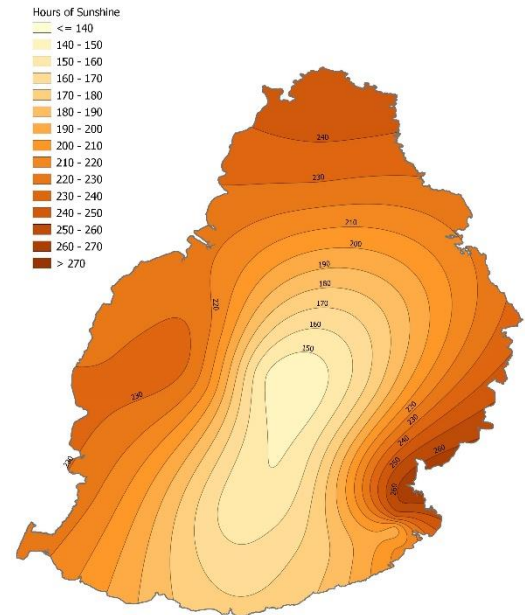
The number of daily bright sunshine hours was close to the normal both at Plaisance and at Vacoas; the anomaly was -0.3 and -1.0 respectively. The highest number of sunshine hours was 12.2 recorded on Day 02 at Plaisance. The lowest number of sunshine hours recorded was 0.0 recorded on Day 10 at Vacoas and on Day 11 at both Plaisance and Vacoas.



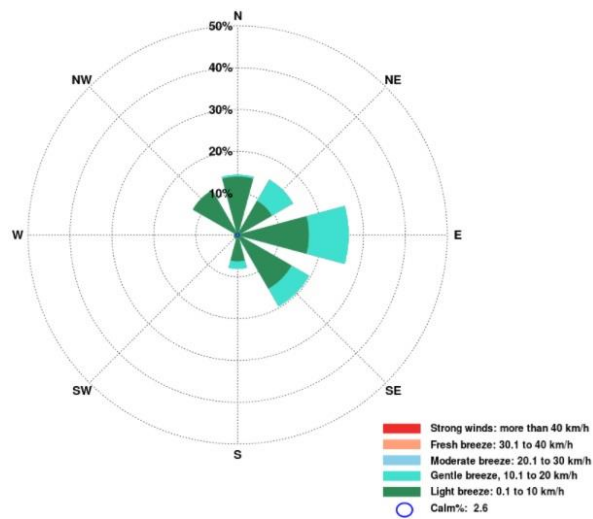
Monthly mean humidity



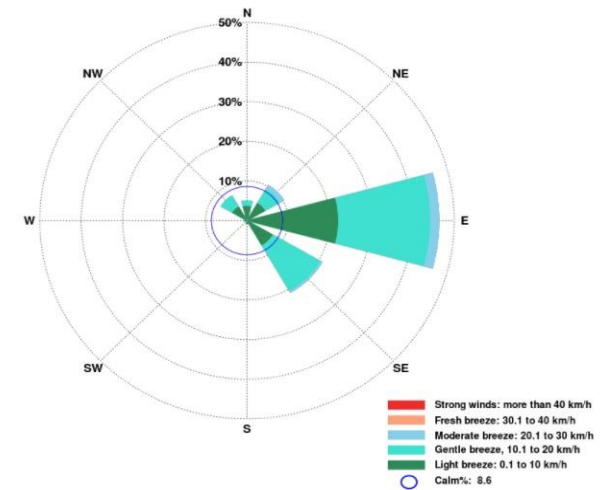
Monthly total sunshine hours



Winds

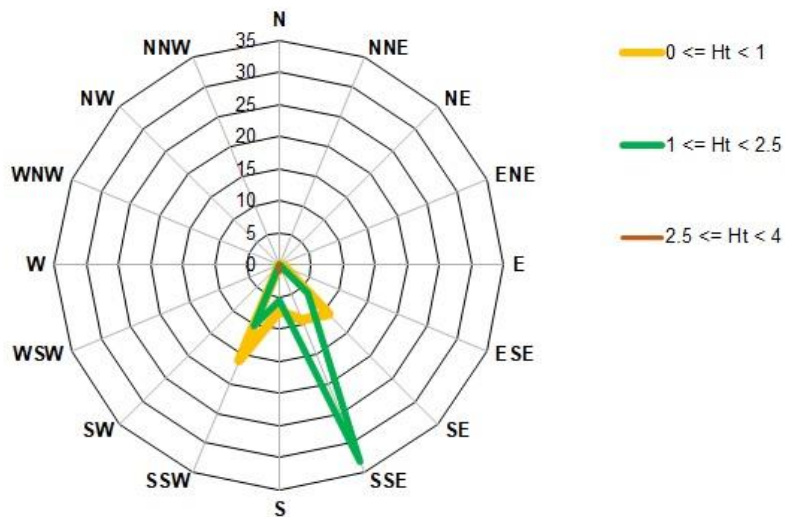


Wind frequencies from Plaisance (left) and Vacoas (right) shows winds mainly from the eastern sector. On few other instances, the wind blew from the south, south east and even the northern sector. Light wind prevailed most of the time over the island. Nevertheless, anticyclone transiting to the south of the island led to some occasional gusty events.



Regions	Highest gusts (km/h)	Date
Domaine Les Pailles	86	31
Beau Songes	83	10
Champs De Mars	79	24
Le Morne	65	31

Sea state



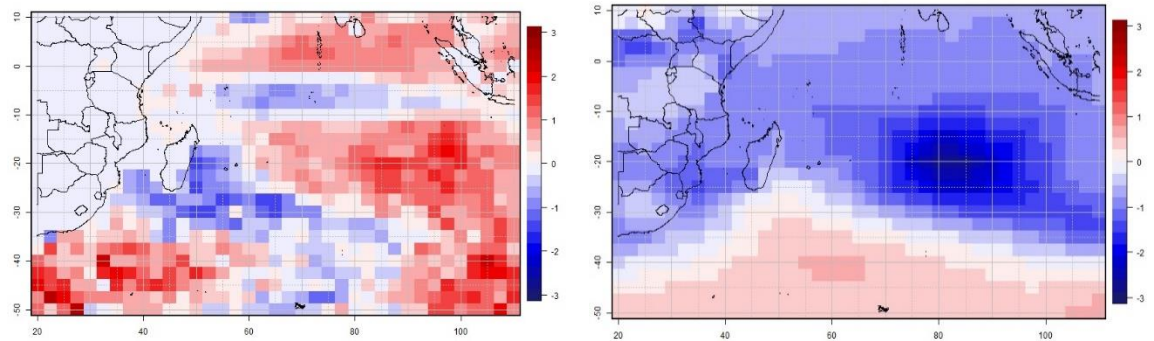
Significant waves recorded indicated that the sea was mainly moderate with south south-easterly waves of height between 1 and 2.5 m. On a few occasions, swell waves of the order of 1 m influenced the open sea.

Sea parameter	Height in meters	Date
Highest significant wave recorded	2.95	26
Highest wave recorded	4.75	26

FORECAST FOR MARCH-APRIL-MAY (MAM)

Weak La Nina conditions are expected to persist in the equatorial Pacific Ocean gradually transiting to neutral conditions by the end of the forecast period. IOD will remain neutral whereas SIOD will be in the weak negative phase.

SST and pressure anomaly will be normal to slightly below in the Mascarene region. A warm pool and areas of low pressure anomalies are forecasted in the central eastern Indian Ocean during this period as shown in the SST and pressure anomaly charts respectively.



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

Consensus forecast for Mauritius

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

- March: normal (~ 290 mm)
- April: normal (~ 190 mm)
- May: normal (~ 140 mm)

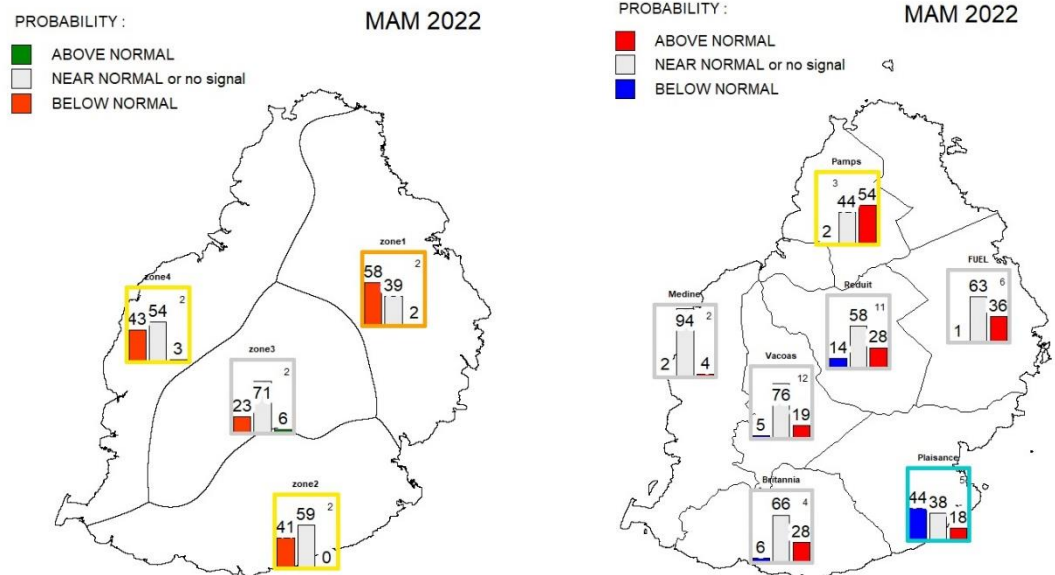
Mean temperature is forecasted to be normal.

The right of publication in print, electronic and any other form is reserved by the Meteorological Services. Any part of this document may be reproduced provided complete source is acknowledged or after authorization from:

**Director, Meteorological Services,
St Paul; Road Vacoas,**

Tel: 6861031/32, Fax: 6861033, email: meteo@intnet.mu

Updated on: 02 March 2022



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