



MAURITIUS METEOROLOGICAL SERVICES



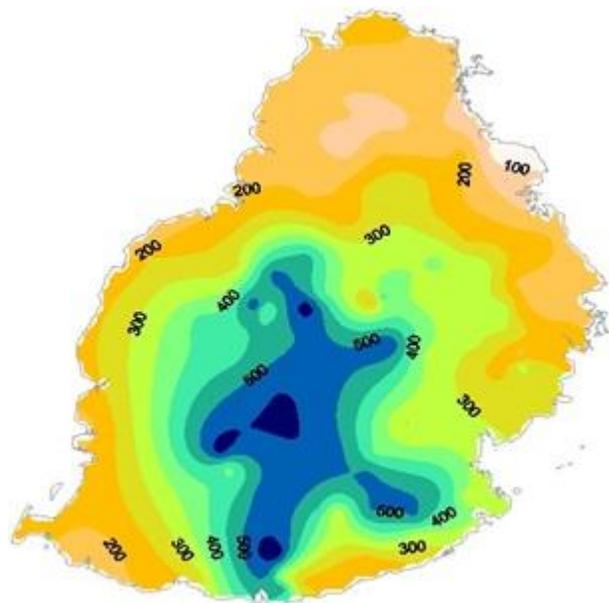
CLIMATE FEBRUARY 2018

Introduction

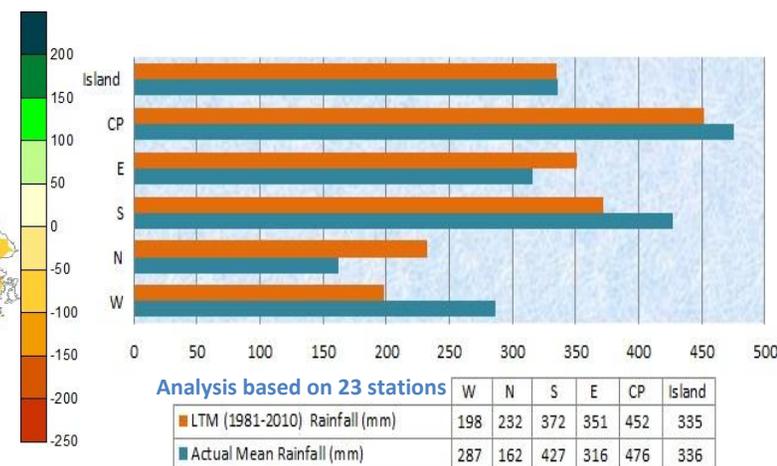
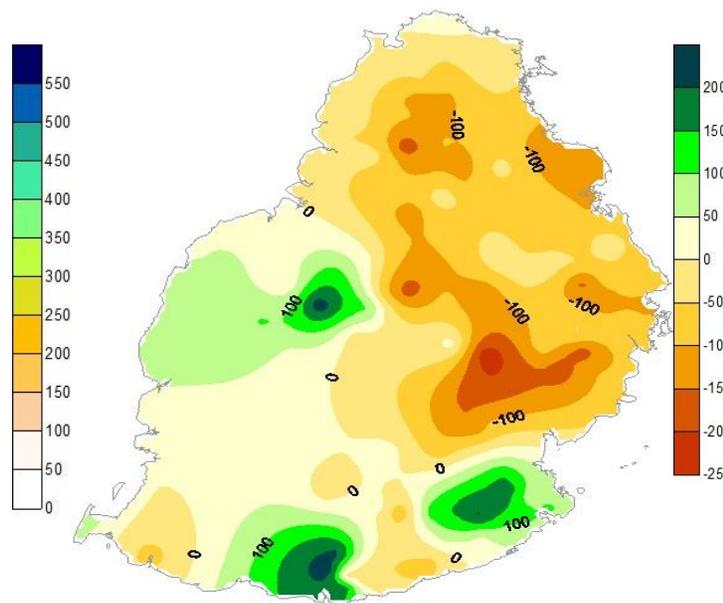
Persistent northwesterly winds induced unstable conditions leading to frequent heavy showers and thunderstorms particularly in the afternoon setting a record in terms of days with thunderstorm. However, there was a lull in cyclonic activity in the South West Indian Ocean basin. The only storm, which evolved in the South East Indian Ocean, was intense tropical cyclone CEBILE but was named on 27 January 2018. Neutral ENSO prevailed during the month and the Indian Ocean Dipole (IOD) remained neutral. The Madden Julian Oscillation (MJO) signal became active in the south equatorial Indian Ocean during the last week of the month.

Rainfall

Observed Rainfall (mm)



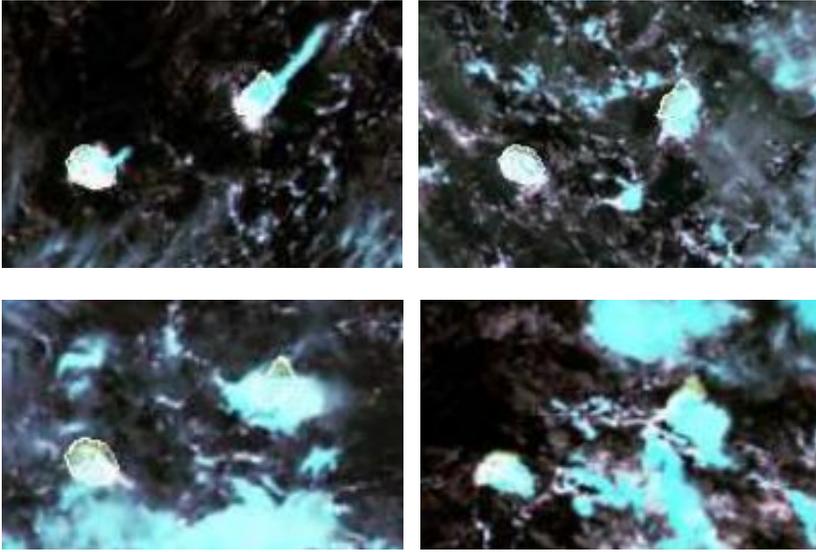
Rainfall Anomaly (mm)



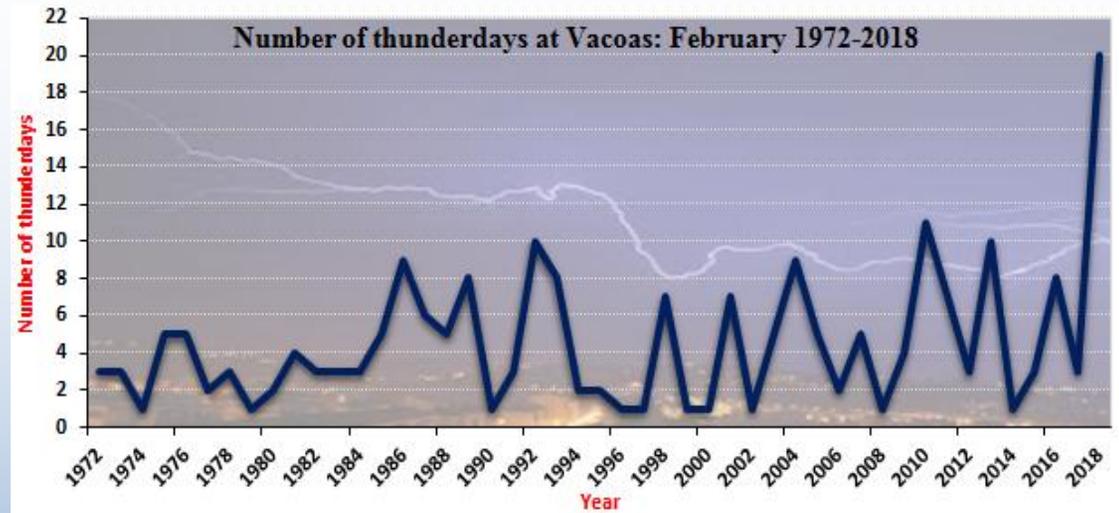
Normal rainfall was recorded during February 2018 but with two distinct spatial distributions; one normal to above normal and one normal to below normal rainfall. Rainfall was mostly of short duration, heavy and localised associated mostly with convective cloud built up during the day. This was particularly observed to the South, Southeast and over the leeward side of the Central Plateau where localised flash floods and water accumulations was quite frequent. Positive rainfall anomalies of over 150 mm are observed locally in these regions. Deficient rainfall of up to 200 mm was observed locally to the East and the North.

The wettest day was on the 23 with a maximum 24 hour rainfall of only 169mm, but several stations reporting rainfall intensities reaching in the range 45-55mm/h. The highest rainfall intensity recorded was 72.2 mm/h at Mon Bois on 15.

Severe afternoon convective clouds development over the island of Mauritius on 04, 11, 15 and 23 (left to right).



February 2018 holds the highest number of thunderdays on record superseding that of April 1978. It amounts to 20 days at Vacoas and 17 days at Plaisance



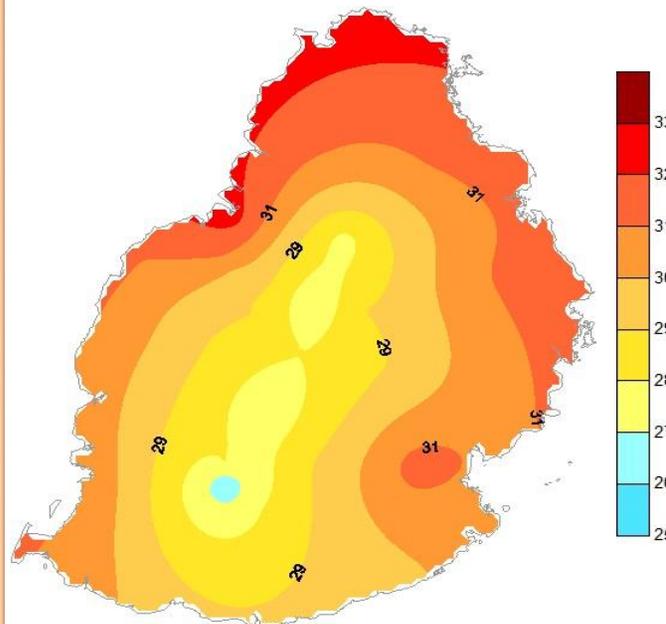
Surface Temperature

Highest daily maximum temperature reached 34.5°C at Port Louis. A discernible anomaly in the mean monthly maximum and minimum temperatures. Slightly above monthly mean maximum temperature over the Central Plateau and the East and exceptionally above to the Southeast. Mean **monthly** anomalies in daytime temperatures vary from 0 to +2.3 °C.

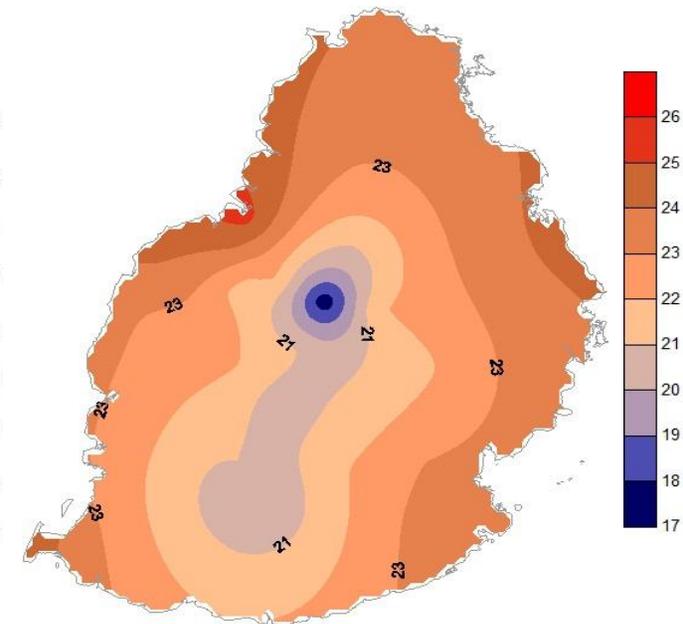
Night-time clear sky and light wind conditions leading to mainly close to normal minimum temperatures. However, cooler minimum over some coastal areas. Mean **monthly** anomalies in night temperatures vary from -0.7 to +1.0 °C.

Warm and sultry conditions prevailed over the island from 11 to 22 of the month with maximum temperature anomaly of +3.5°C at Vacoas and +5.2°C at Riche En Eau. Temperature distribution indicates 5 days of continuous warm days from 11 to 15 which is equivalent to a heat wave. This was particularly felt to the East, Southeast and over the Central Plateau.

Maximum Temperature



Minimum Temperature



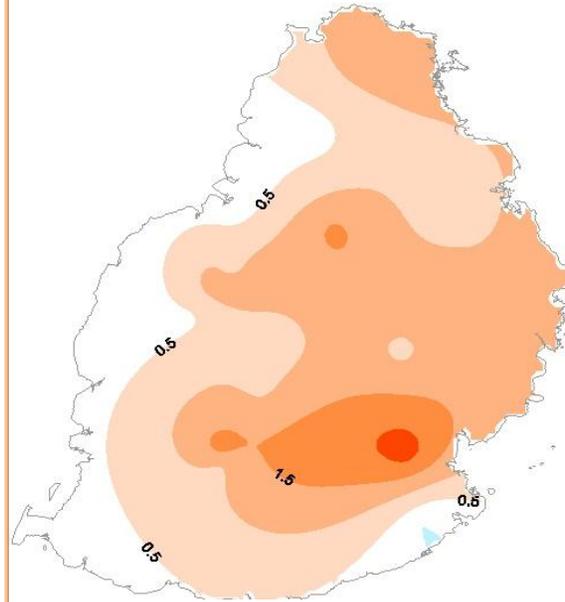
Maximum and Minimum surface temperature during February 2018

Some stations had up to 17 warm days (maximum temperature anomaly (anomax) >2°C).

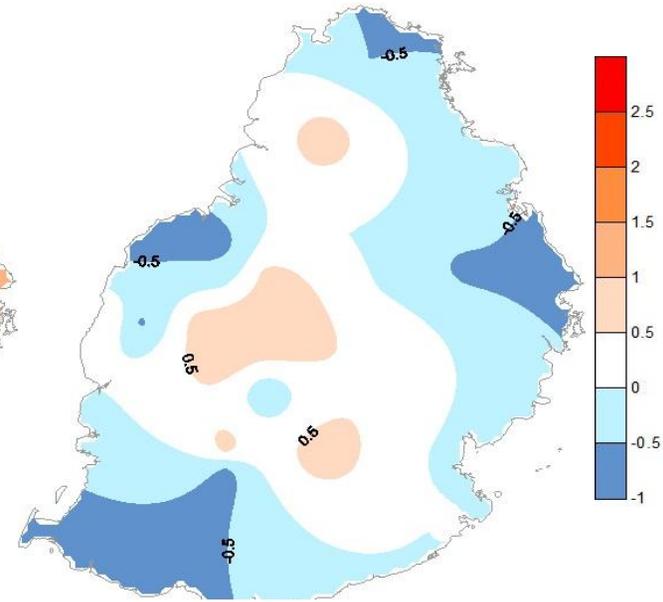
Stations	Highest anomax (°C)	Number of warm days.
Union Park	4.6	13
Riche en Eau	5.2	17
Plaisance	1.9	0
Belle Mare	2.8	9
Providence	3.5	12
Mon Desert Alma	3.0	9
Fuel	3.6	12
Mare aux Vacoas	4.3	15
Bois Cheri	2.9	9
Mon Bois	3.6	6
Nouvelle Decouverte	4.9	13
Mon Loisir Rouillard	2.7	6
Vacoas	3.5	3
Pailles	2.5	7
Beau Songes	1.9	0

From 05-08, cloudy and rainy conditions caused a drop in temperature over the whole island. The anomaly in the maximum at Vacoas and Plaisance was below the monthly mean by up to -2.1 and -2.5 °C respectively.

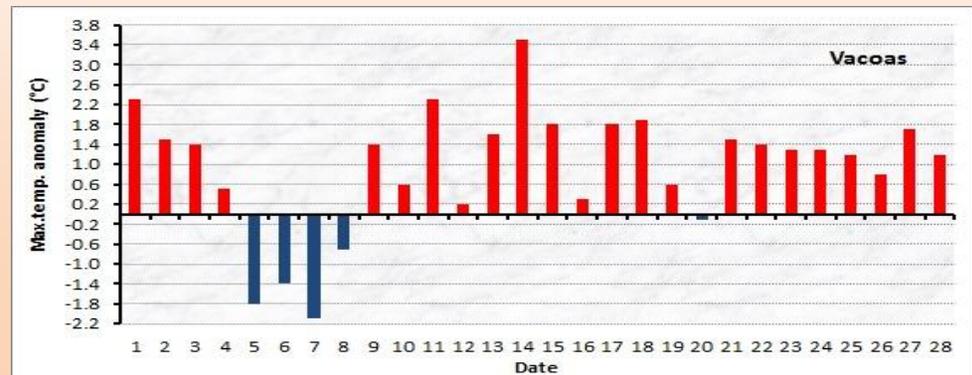
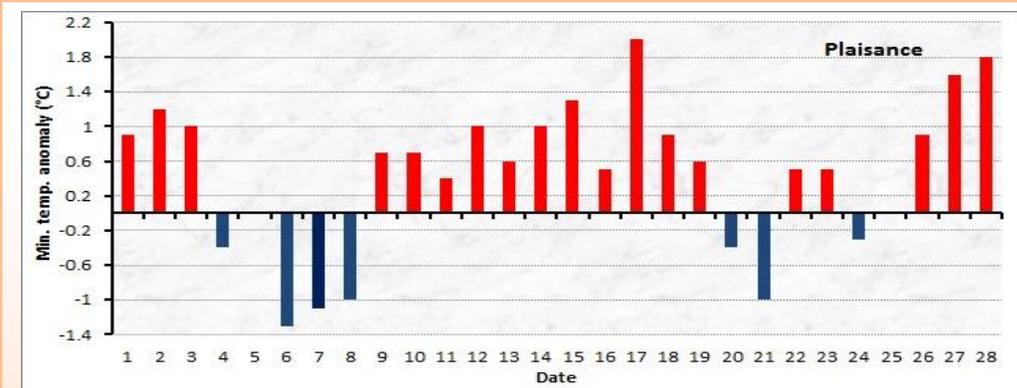
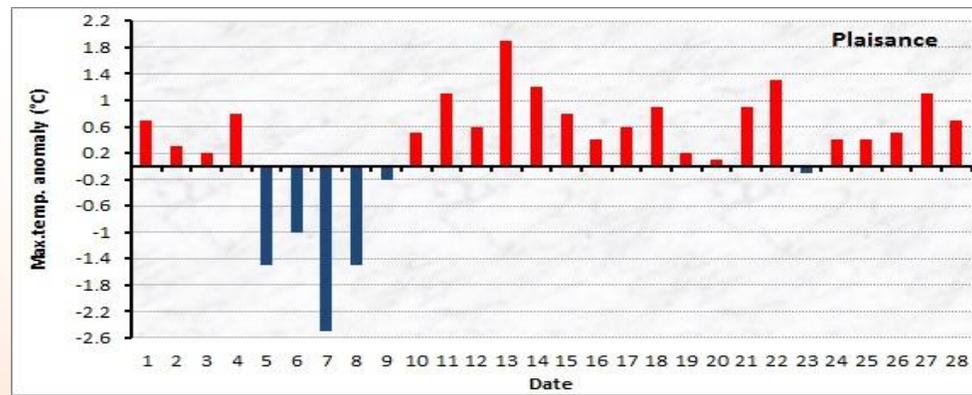
Maximum temperature anomaly



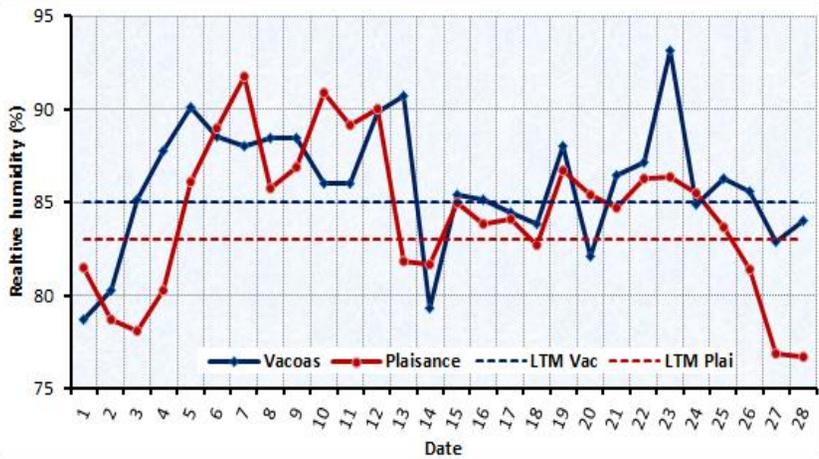
Minimum temperature anomaly



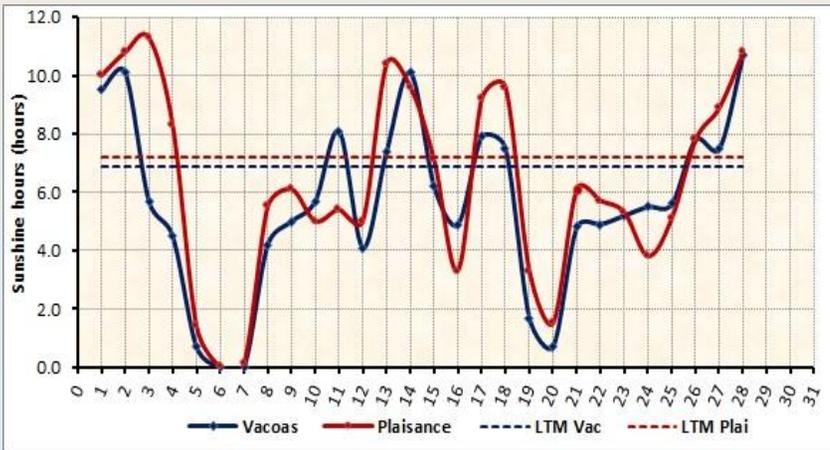
Maximum and Minimum surface temperature anomaly during February 2018



2.3 Sunshine and Humidity



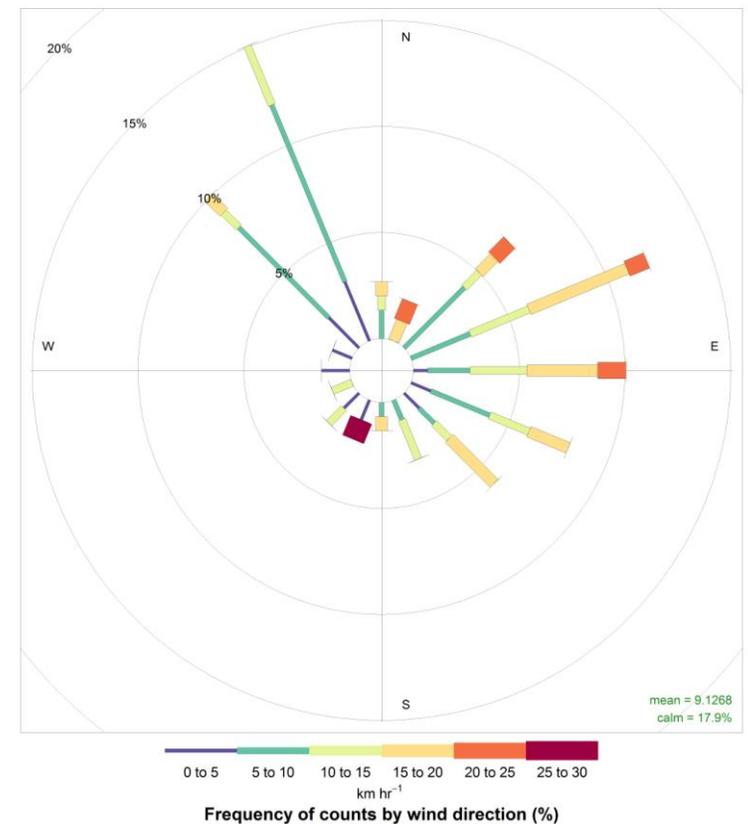
A close to normal monthly mean humidity. Occasional daily values exceeding 90% or plummeting below 80%.



Monthly mean sunshine hours below the long term mean by 1.3 hours and 0.9 hours at Vacoas and Plaisance respectively. Two days of nil sunshine on 06 and 07 of the month.

Daily sunshine hours and relative humidity at Vacoas and Plaisance.

2.4 Winds



A month marked by an extended period of northeasterly to northwesterly winds bringing sultry conditions over the island. The persistent light wind conditions coupled with moisture contributed to the heat wave experienced from 11-15.

Wind exceeded 20 km/h on rare occasions in heavy showers.