

MONTHLY CLIMATE BULLETIN

SMA/CLI/FM/011

Created by : T. Nomenjanahary

Revision Number: 0 (NEW)

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MONTHLY CLIMATE BULLETIN OCTOBER 2024

1. Introduction

This bulletin summarizes the climate conditions on Mahe, Praslin, and La Digue for October 2024. Dry conditions were observed over the whole country. Both the El Niño Southern Oscillation (ENSO) and the Indian Ocean Dipole (IOD) remained in neutral phases. The MJO index propagated from phase 4 through phase 8 during the month of October.

2. Monthly Rainfall Performance in October 2024

2.1 Distribution of Rainfall for October 2024

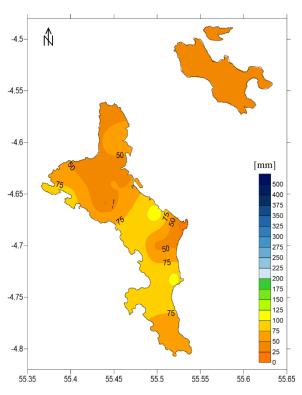


Figure 1: Monthly total rainfall in mm during
October 2024

Figure 1 shows the spatial distribution of rainfall for October 2024 over Seychelles.

The total rainfall varied between 11 mm and 118 mm, with the highest recorded value at Cascade and the lowest at Praslin-Fond-Boffay. Regions receiving less than 50 mm of rainfall include the northern tips, some areas in the north and the southeastern portion of the central area of Mahe, as well as parts of Praslin and La Digue.



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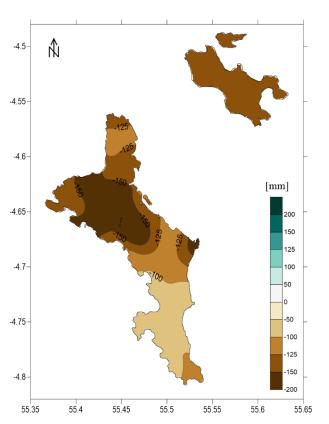
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2.2 Monthly Rainfall Anomaly and Percentage of Mean Rainfall during October 2024



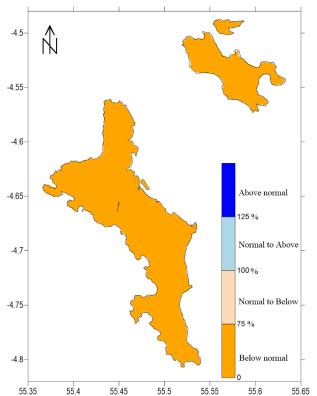


Figure 2: Monthly rainfall anomaly in mm during
October 2024

Figure 3: Percent of mean rainfall during October 2024

Figure 2 illustrates the rainfall anomalies for October 2024. Negative anomalies dominate the Seychelles, indicating a significant reduction in rainfall compared to the long-term mean. The most notable decrease of -150 mm is observed in the northwestern and central regions of Mahe. The percentage of mean rainfall for October 2024 revealed that rainfall was below normal across the country (Figure 3-Figure 4).



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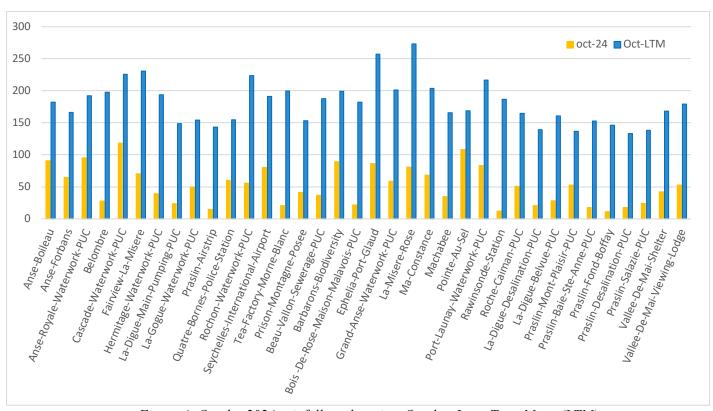


Figure 4: October 2024 rainfall total against October Long Term Mean (LTM)

3. Daily Weather for October 2024 at Seychelles International Airport

3.1 Daily rainfall, relative humidity, maximum and minimum temperature in October 2024

In October 2024, the Seychelles Airport weather station experienced predominantly dry conditions, with no rainfall on 26 days and precipitation occurring on only five days. A significant rainfall peak of 72.5 mm was recorded toward the end of the month, markedly higher than the smaller totals observed on the other rainy days. On October 31st, the weather was characterized by scattered to broken low-level clouds, accompanied by a west-to-east band of active clouds traversing across Mahe. The relative humidity remained above 70% throughout the month, except on the 28th, when it dropped slightly to 68%.



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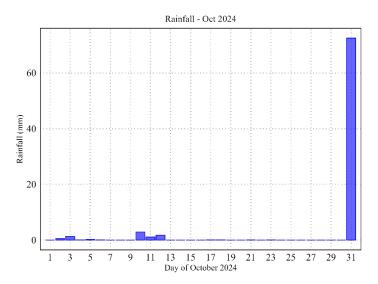
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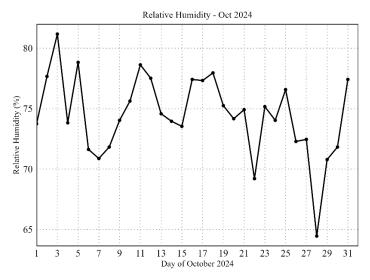
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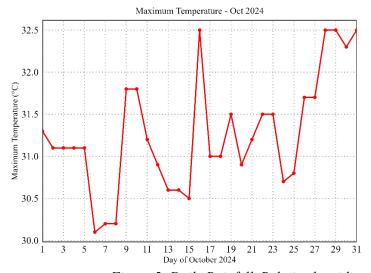
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The maximum temperature ranged from 30.1°C to 32.5°C, with the highest value of 32.5°C first observed on the 16th. The last four days of the month were consistently warm, with maximum temperatures reaching 32.5°C, except for a slight dip to 32.3°C on the 30th. The minimum temperature spanned from 24.7°C to 27.3°C, with the lowest value of 24.7°C recorded on the 22nd and 23rd, while the highest minimum temperature of 27.3°C occurred on the 19th.







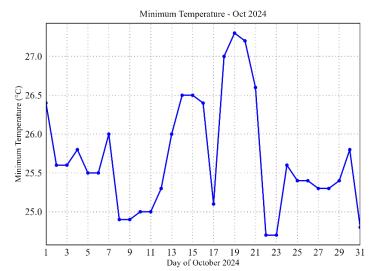


Figure 5: Daily Rainfall, Relative humidity, Maximum temperature, Minimum temperature in October 2024



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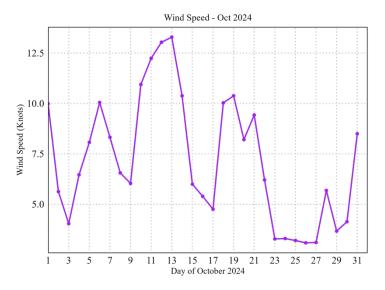
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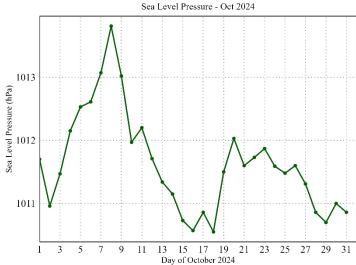
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3.2 Daily Sunshine hours, Mean Sea level pressure and surface wind in October 2024

The wind speed recorded at the airport station during October 2024 ranged from 3.1 to 13.3 knots, with an average of 7.2 knots for the month. The sea level pressure had an average value of 1011.6 hPa, with a minimum of 1010.6 hPa observed on the 16th and 18th and a maximum value of 1013.8 hPa recorded on the 8th of October.

The average sunshine duration during October 2024 was 8.8 hours per day. The lowest value of sunshine, 3.8 hours, was recorded on the 12th of the month, a day characterized by mostly scattered to broken clouds. The maximum sunshine duration of 10.9 hours occurred on both the 20th and the 28th. Additionally, periods from the 20th to the 22nd and from the 28th to the 30th were marked by consistently high sunshine durations exceeding 10 hours per day.







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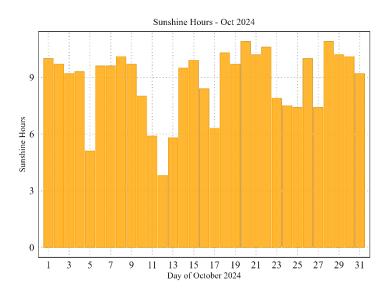


Figure 6: Daily Wind speed, Sea Level pressure, sunshine hours in October 2024

3.3 Wind Pattern in October 2024

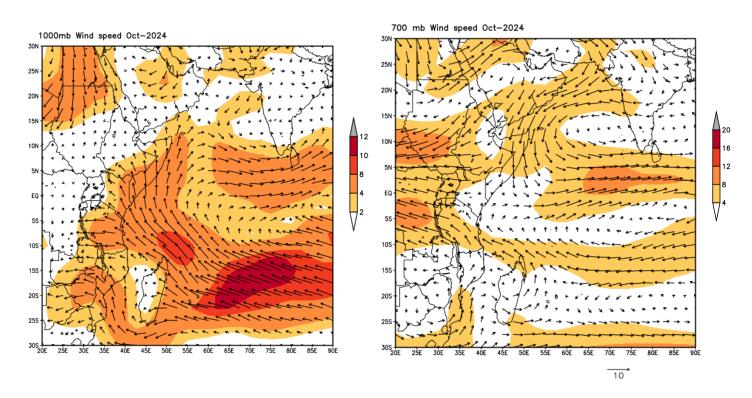


Figure 7: Surface wind flow (left) and wind flow at 700mb (right)

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The figure depicts the wind pattern at 1000 mbar during October 2024. Near the surface, the winds over Mahe were moderate and predominantly southeasterly, influenced by the circulation from the Mascarene High. To the west of Mahe, wind speeds ranged from 4 to 10 m/s. The trough axis extended primarily toward the north.

At mid-level, the Westerly winds blowing to Mahe were also moderate ranging between 4m/s to 8m/s.

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