## **Climate and Weather Bulletin**







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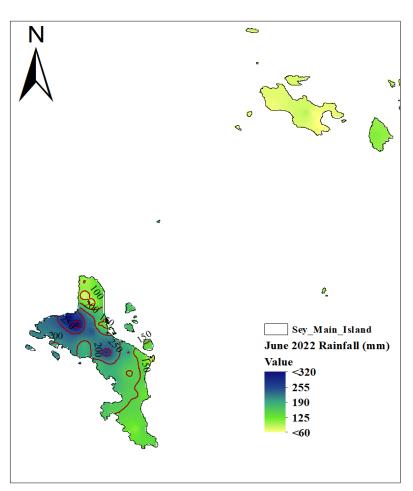


#### 1. Introduction

This bulletin reviews climate conditions over Mahe, Praslin, and La Digue and highlights the status of the climate systems during the month of June 2022. The basin remained under the influence of Monsoon trough pattern which was mainly concentrated to the south and occasionally strongly interrupted by the presence of tropical lows from the east. Therefore, convective activities were predominant over the lows and the convergence zone.

#### 2. Rainfall Performance in June 2022

### 2.1 Spatial Rainfall Distribution for June 2022



The spatial rainfall distribution for June (Figure 1) indicates that extreme Northern and Southern Mahe, Praslin as well as la Digue were drier with rainfall amounts below 150mm compared to Western Mahe which recorded rainfall above 200mm in June. The highest rainfall over Mahe amounting to 334.5mm was recorded at the Le Niol Waterwork PUC station. On Praslin Island, the maximum was 111.0mm recorded at Vallee De Mai Viewing Lodge station and, on La Digue, Belvue PUC station recorded a maximum of 114.5mm. An overall minimum of 57.0mm was reported at Desalination PUC Station in Praslin.

Figure 1: June 2022 Spatial Rainfall Distribution





When comparing the reported rainfall to the long term mean of each station (Figure 2), it is clear that most stations received rainfall amount which considerably exceeded their respective long-term mean. However, 13 stations got slightly less than their monthly mean rainfall for June.

The basin remained majorly under the influence of weak Monsoon Trough pattern which was occasionally interrupted by the presence of tropical lows along its eastern edge. Therefore, convective activity was concentrated on the low pressure systems.

Looking at it in terms of percentages (Figure 3), again the West and Northwestern side of Mahe performed better. Barbarons Biodiversity station received 200.2% of its long-term mean rainfall in June.

Table 1 summarizes June's rainfall performance. 18 stations of the 37 reported Above-Normal rainfall with significantly high positive anomalies, 15 stations reported Near-Normal, and 4 stations reported Below-Normal rainfall for June. Generally, the monthly rainfall performance was above-Normal to Near-Normal.





### 2.2 June Rainfall Totals Compared to Long-Term Mean

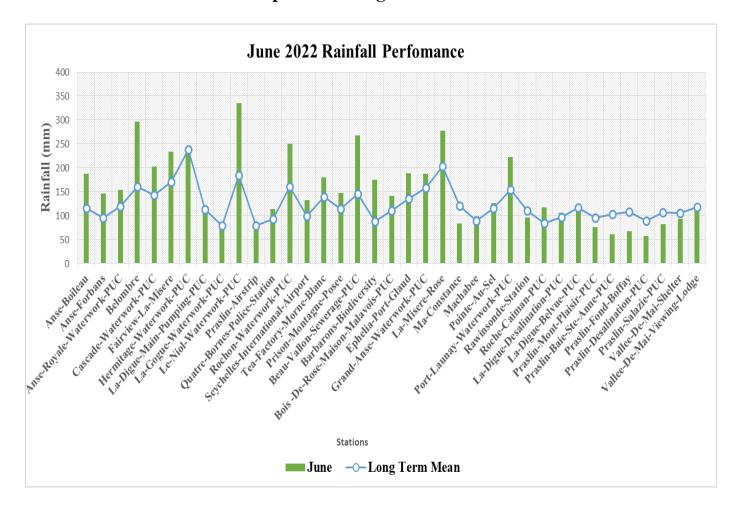


Figure 2: June 2022 rainfall totals compared to the long-term mean





### 2.3 Percentage of Mean Rainfall for June 2022

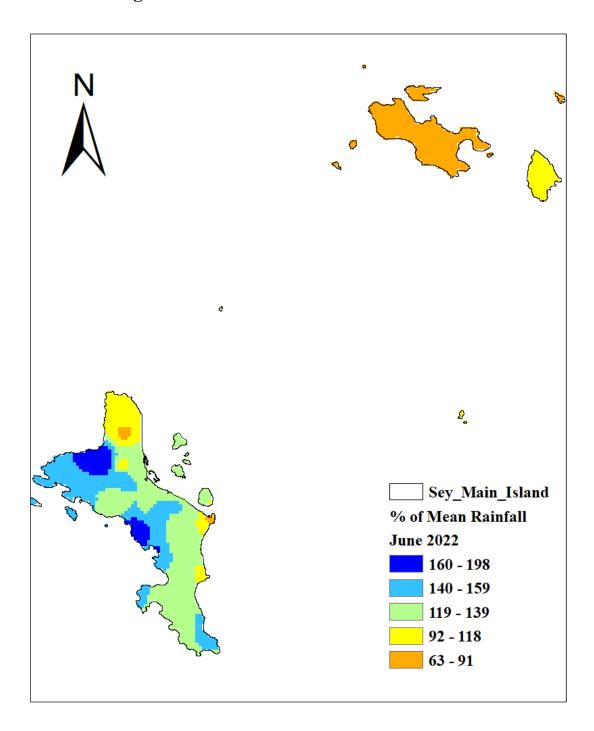


Figure 3: Percentage of mean Rainfall for June 2022





Table 1: Rainfall performance in June

| Stations                          | June  | Long Term Mean | BN    | AN    | BN? | AN? | Anomalies |
|-----------------------------------|-------|----------------|-------|-------|-----|-----|-----------|
| Anse-Boileau                      | 187.3 | 115.5          | 86.6  | 144.4 | NO  | YES | 71.8      |
| Anse-Forbans                      | 146.4 | 94.9           | 71.2  | 118.6 | NO  | YES | 51.5      |
| Anse-Royale-Waterwork-PUC         | 153.5 | 119.5          | 89.6  | 149.4 | NO  | YES | 34.0      |
| Belombre                          | 296.3 | 159.9          | 119.9 | 199.9 | NO  | YES | 136.4     |
| Cascade-Waterwork-PUC             | 202.2 | 143            | 107.3 | 178.8 | NO  | YES | 59.2      |
| Fairview-La-Misere                | 233.1 | 170            | 127.5 | 212.5 | NO  | YES | 63.1      |
| Hermitage-Waterwork-PUC           | 237.5 | 237.5          | 178.1 | 296.9 | NO  | NO  | 0.0       |
| La-Digue-Main-Pumping-PUC         | 104.3 | 112.5          | 84.4  | 140.6 | NO  | NO  | -8.2      |
| La-Gogue-Waterwork-PUC            | 77.8  | 78.6           | 59.0  | 98.3  | NO  | NO  | -0.8      |
| Le-Niol-Waterwork-PUC             | 334.5 | 184.7          | 138.5 | 230.9 | NO  | YES | 149.8     |
| Praslin-Airstrip                  | 69.9  | 79.2           | 59.4  | 99.0  | NO  | NO  | -9.3      |
| Quatre-Bornes-Police-Station      | 113.5 | 93             | 69.8  | 116.3 | NO  | NO  | 20.5      |
| Rochon-Waterwork-PUC              | 250.2 | 160.6          | 120.5 | 200.8 | NO  | YES | 89.6      |
| Seychelles-International-Airport  | 132.2 | 99.3           | 74.5  | 124.1 | NO  | YES | 32.9      |
| Tea-Factory-Morne-Blanc           | 180.1 | 139.6          | 104.7 | 174.5 | NO  | YES | 40.5      |
| Prison-Montagne-Posee             | 146.7 | 114.1          | 85.6  | 142.6 | NO  | YES | 32.6      |
| Beau-Vallon-Sewerage-PUC          | 266.9 | 145.7          | 109.3 | 182.1 | NO  | YES | 121.2     |
| Barbarons-Biodiversity            | 174.8 | 87.3           | 65.5  | 109.1 | NO  | YES | 87.5      |
| Bois -De-Rose-Maison-Malavois-PUC | 140.7 | 110.8          | 83.1  | 138.5 | NO  | YES | 29.9      |
| Ephelia-Port-Glaud                | 188.2 | 135.4          | 101.6 | 169.3 | NO  | YES | 52.8      |
| Grand-Anse-Waterwork-PUC          | 187.5 | 158.2          | 118.7 | 197.8 | NO  | NO  | 29.3      |
| La-Misere-Rose                    | 277.4 | 203            | 152.3 | 253.8 | NO  | YES | 74.4      |
| Ma-Constance                      | 84    | 120.3          | 90.2  | 150.4 | YES | NO  | -36.3     |
| Machabee                          | 99    | 88.6           | 66.5  | 110.8 | NO  | NO  | 10.4      |
| Pointe-Au-Sel                     | 125.5 | 114.9          | 86.2  | 143.6 | NO  | NO  | 10.6      |
| Port-Launay-Waterwork-PUC         | 221.9 | 153.8          | 115.4 | 192.3 | NO  | YES | 68.1      |
| Rawinsonde-Station                | 96.4  | 110.5          | 82.9  | 138.1 | NO  | NO  | -14.1     |
| Roche-Caiman-PUC                  | 117.1 | 84.6           |       | 105.8 | NO  | YES | 32.5      |
| La-Digue-Desalination-PUC         | 106.6 | 96.6           | 72.5  | 120.8 | NO  | NO  | 10.0      |
| La-Digue-Belvue-PUC               | 114.5 | 116.8          | 87.6  | 146.0 | NO  | NO  | -2.3      |
| Praslin-Mont-Plaisir-PUC          | 76.5  | 95.6           | 71.7  | 119.5 | NO  | NO  | -19.1     |
| Praslin-Baie-Ste-Anne-PUC         | 61    | 103.4          | 77.6  | 129.3 | YES | NO  | -42.4     |
| Praslin-Fond-Boffay               | 67    | 107.9          | 80.9  | 134.9 | YES | NO  | -40.9     |
| Praslin-Desalination-PUC          | 57    | 89.5           | 67.1  | 111.9 | YES | NO  | -32.5     |
| Praslin-Salazie-PUC               | 82.8  | 106.3          | 79.7  | 132.9 | NO  | NO  | -23.5     |
| Vallee-De-Mai-Shelter             | 93    | 105.8          | 79.4  | 132.3 | NO  | NO  | -12.8     |
| Vallee-De-Mai-Viewing-Lodge       | 111   | 118.5          | 88.9  | 148.1 | NO  | NO  | -7.5      |





### 3. Daily Weather for June 2022 at the Seychelles International Airport

### 3.1 Daily rainfall, relative humidity, maximum and minimum temperatures in June 2022

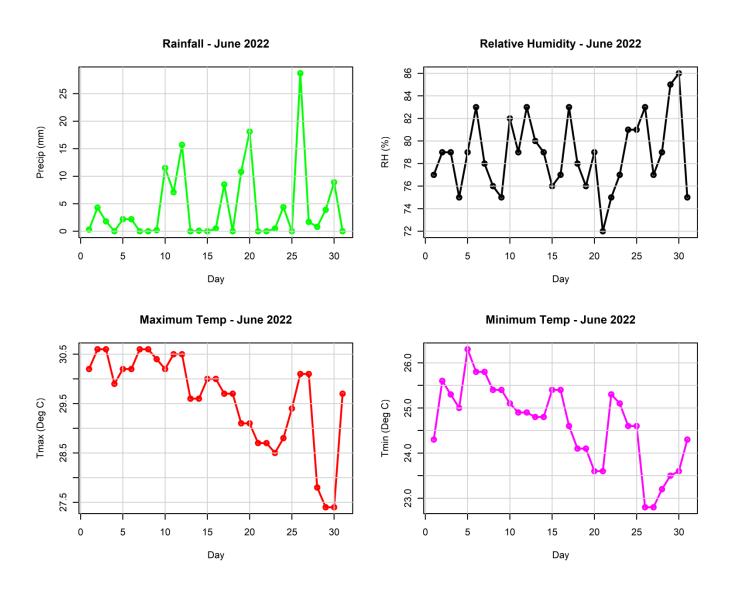


Figure 4: Daily rainfall, relative humidity, maximum and minimum temperatures in June 2022

The highest recorded daily rainfall in June at the Airport Station was 28.7mm on the 26<sup>th</sup>, with only 3 dry days during the month. The daily mean Relative Humidity was significantly high above 75% (Figure 4). Daily maximum temperature generally remained above 28.0°C for the entire month with a highest temperature of 30.6°C reported on the 3<sup>rd</sup> and 4<sup>th</sup>. The minimum temperature varied between 23.5°C to 26.0°C. However, a minimum temperature of 26.3°C was reported on the 5<sup>th</sup>.





## 3.2 Daily solar Radiation, Sunshine hours, Mean Sea Level Pressure, and Surface wind speeds in June 2022

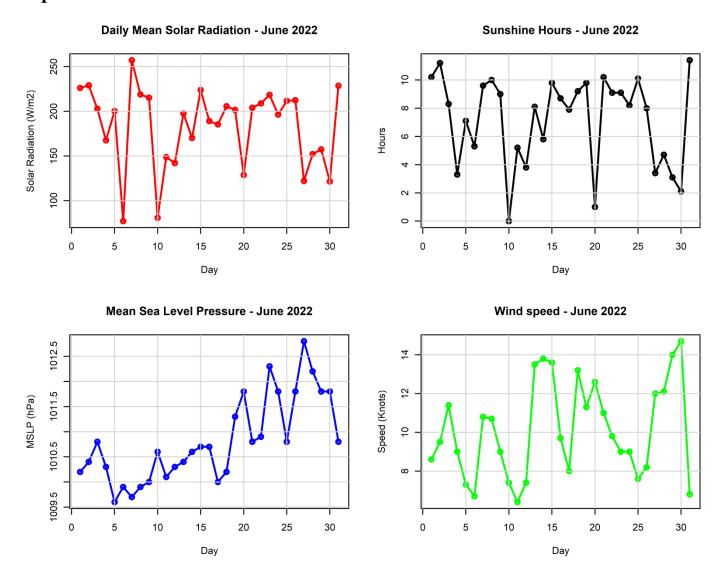


Figure 5: Daily solar Radiation, Sunshine hours, Mean Sea Level Pressure, and Surface wind speeds in June 2022

On average, the mean solar radiation during June remained mostly above 100 W/m2, and the diurnal variation closely matched the sunshine hours. The average wind speeds were moderate, ranging between 6-14 Knots depicting an increasing trend while the mean sea level pressure showed a negative trend with a range of 1008.4-1012.5hPa (Figure 5).





### 4. Wind Patterns in June 2022

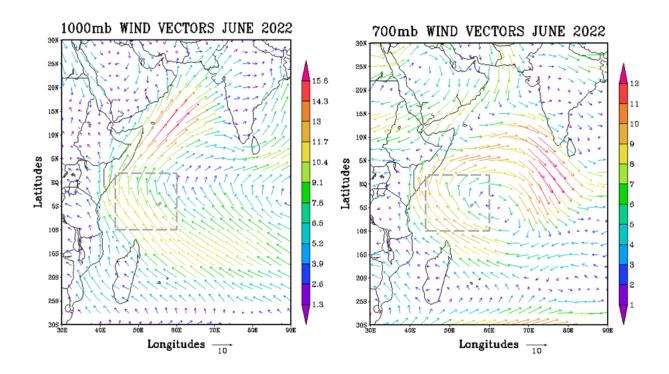


Figure 6: Surface wind flow (left) and wind flow at 700mb (right)

The analysis (Figure 6) indicates that the avegrerage winds near the surface were moderate South-easterlies with the speed ranging between 9.1m/s to 11.7m/s. However, the winds to the South-west of Mahe were stronger and mainly originating from the Mascarene High. The trough axis extended mainly to the north. At the mid-levels, the South-easterly winds were quite light ranging between 3m/s to 5m/s with a persisting cyclonic circulation to the immediate east of Mahe.