

# Climate and Weather Bulletin

APRIL 2022 Weather Review





# SEYCHELLES METEOROLOGICAL AUTHORITY

## May 2022 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 April 2022. The basin remained under the influence of Monsoon trough pattern which was concentrate mainly to the south and occasionally strongly interrupted by the presence of tropical lows to the east. Therefore, convective activities were predominant on the lows and the convergence zone.

### 2. Rainfall Performance in April 2022

#### 2.1 Spatial Rainfall Distribution for April 2022

The spatial rainfall distribution for April (Figure 1) indicates that the extreme Southern and Western Mahe, Praslin as well as la Digue were drier, with rainfall amounts below 120mm compared to Central Mahe which recorded rainfall of between 150-200mm in April. The highest rainfall amounting to 205.1mm was recorded at the Fairview La Misere station. On Praslin Island, the maximum was 164mm recorded at Salazie PUC station, and on La Digue, Main Pumping PUC station recorded a maximum of 119.4mm. An overall minimum of 72.9mm was reported at Grand Anse Waterworks PUC Station.

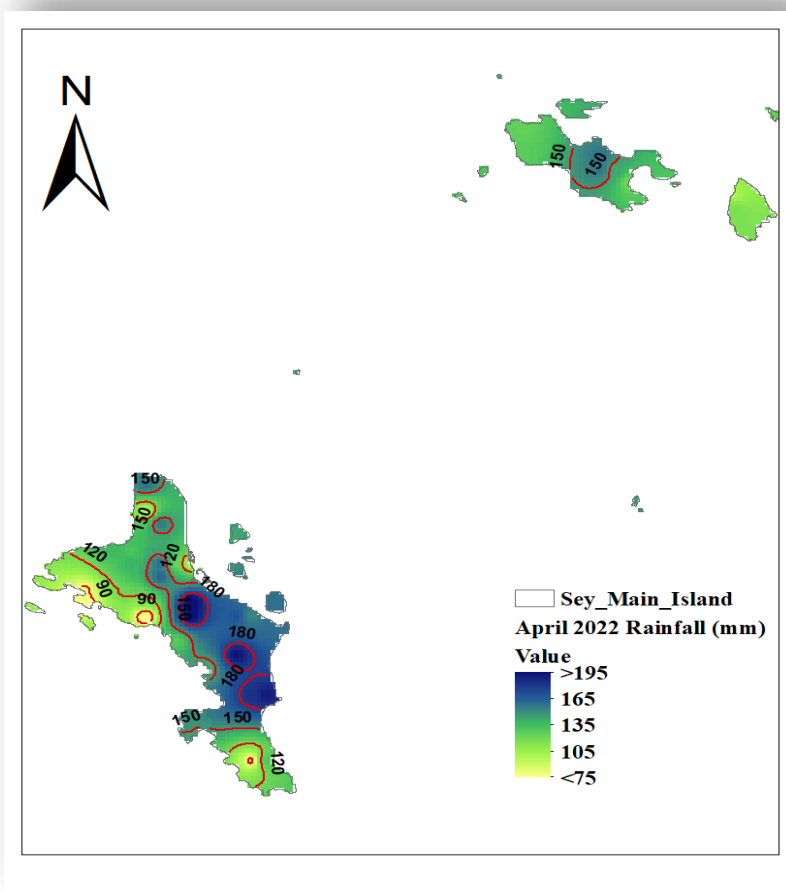


Figure 1: April 2022 Spatial Rainfall Distribution

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 significantly fell short of their respective long-term mean. However, six stations got slightly more than their monthly mean rainfall for

April (Anse Royale Waterwork PUC, Montagne Posee Prison, Machabee, Pointe Au Sel, Rawinsonde Station, and Praslin Salazie PUC).

The basin remained under the influence of weak Monsoon Trough pattern which was strongly interrupted by the presence of tropical cyclones/lows along its southern edge. Therefore, convective activity was focused around the systems away from the islands of Seychelles.

Looking at it in terms of percentages (Figure 3), again the same area extending from around Montagne Posee Prison to Anse Royale on the East side, and over Praslin Island performed better. Machabee station received 102.3% of its long-term mean rainfall in April.

Table 1 summarizes April's rainfall performance. 13 stations of the 37 reported Below-Normal rainfall with significantly high negative anomalies and 24 stations reported Near-Normal rainfall for April. Generally, the monthly rainfall performance was Near-Normal to Below-Normal.

### April Rainfall Totals Compared to Long-Term Mean

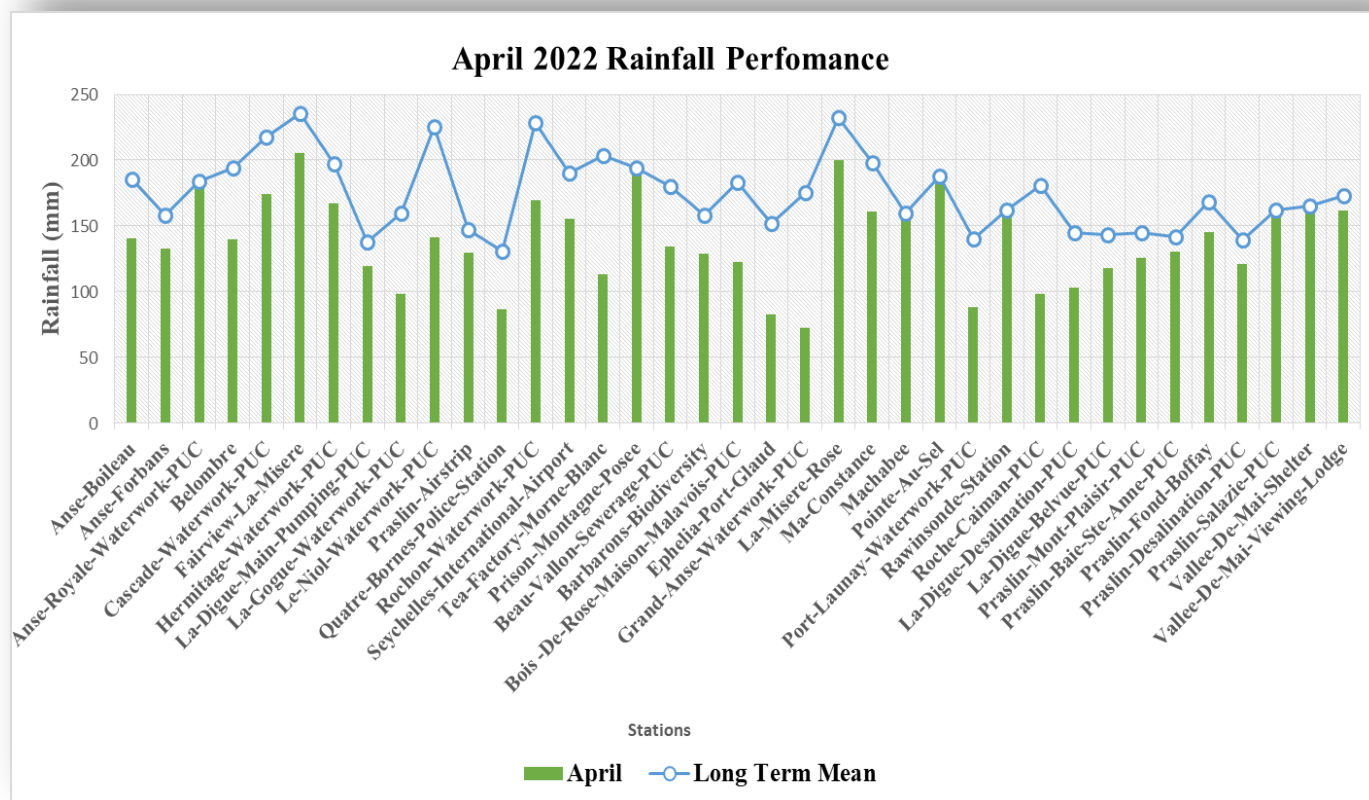
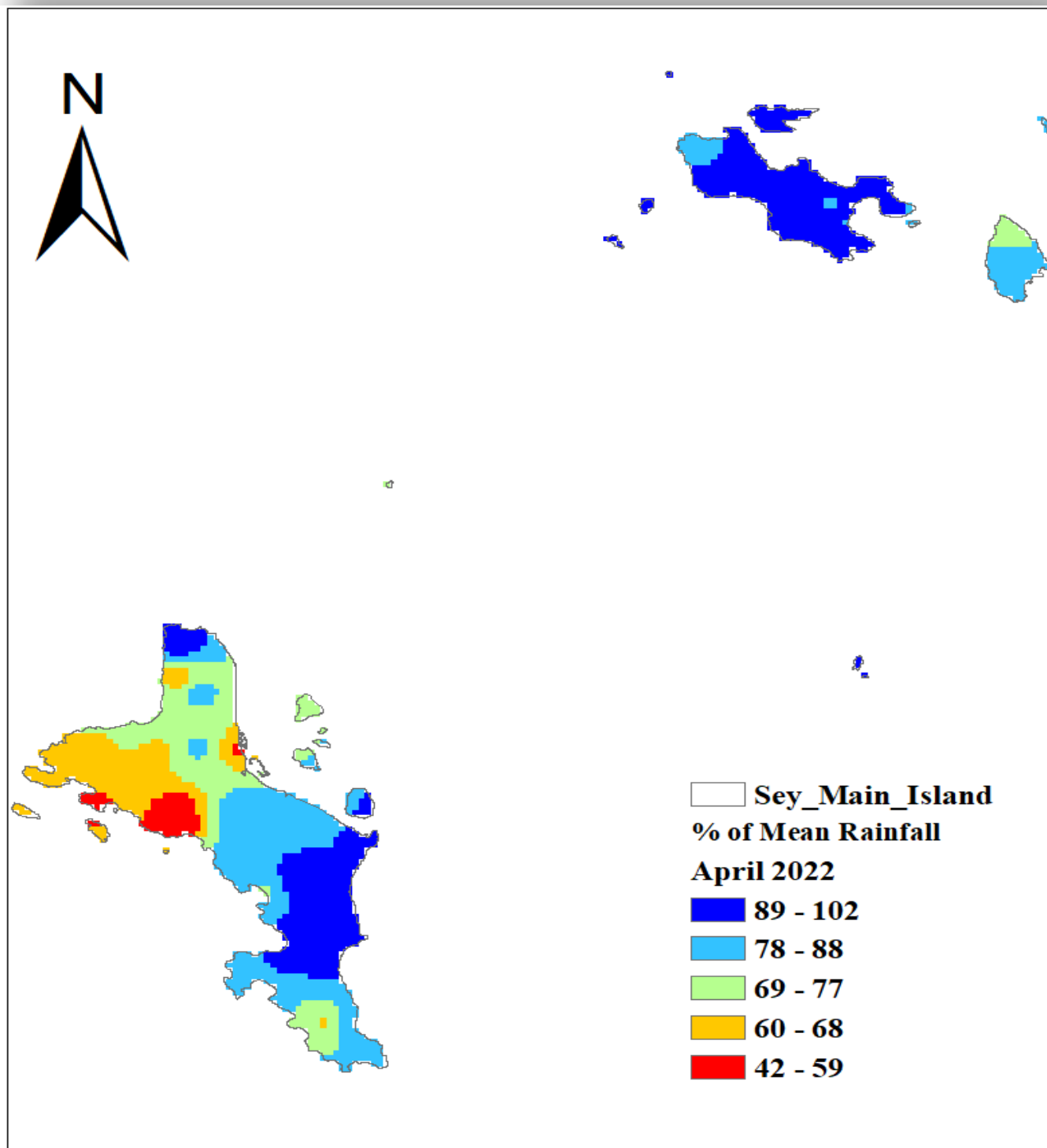


Figure 2: April 2022 rainfall totals compared to the long-term mean

## 2.2 Percentage of Mean Rainfall for April 2022



*Figure 3: Percentage of mean Rainfall for April 2022*

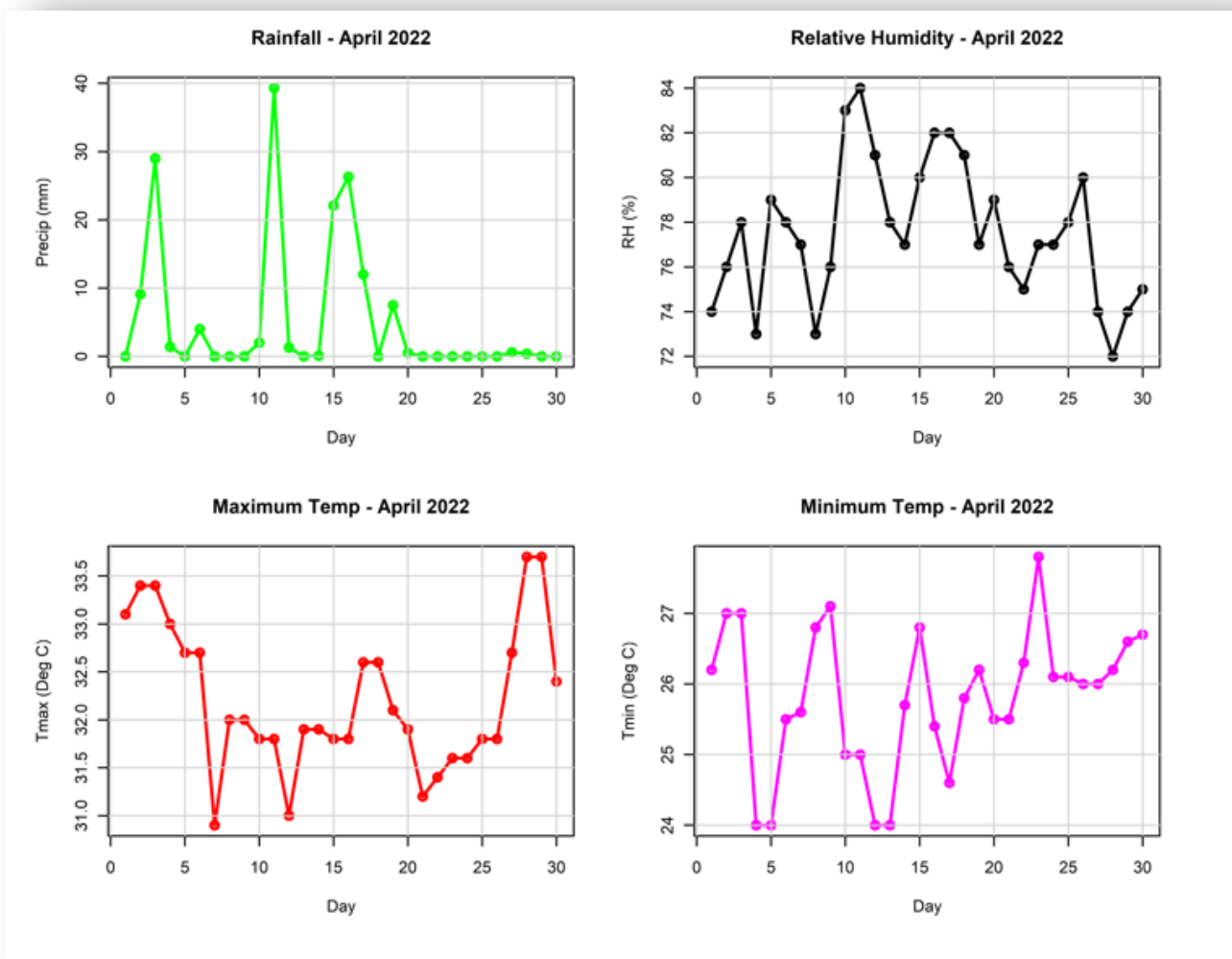


*Table 1: Rainfall performance in April*

Stations	April	Long Term Mean	BN	AN	BN?	AN?	Anomalies
Anse-Boileau	140.5	185.8	139.4	232.3	NO	NO	-45.3
Anse-Forbans	133	158	118.5	197.5	NO	NO	-25.0
Anse-Royale-Waterwork-PUC	184.4	184.2	138.2	230.3	NO	NO	0.2
Belombre	139.8	194	145.5	242.5	YES	NO	-54.2
Cascade-Waterwork-PUC	174.3	217.5	163.1	271.9	NO	NO	-43.2
Fairview-La-Misere	205.1	235.7	176.8	294.6	NO	NO	-30.6
Hermitage-Waterwork-PUC	166.8	197.1	147.8	246.4	NO	NO	-30.3
La-Digue-Main-Pumping-PUC	119.4	137.5	103.1	171.9	NO	NO	-18.1
La-Gogue-Waterwork-PUC	98	159.4	119.6	199.3	YES	NO	-61.4
Le-Niol-Waterwork-PUC	141.6	225.4	169.1	281.8	YES	NO	-83.8
Praslin-Airstrip	129.5	147.5	110.6	184.4	NO	NO	-18.0
Quatre-Bornes-Police-Station	86.9	130.4	97.8	163.0	YES	NO	-43.5
Rochon-Waterwork-PUC	169.6	228.2	171.2	285.3	YES	NO	-58.6
Seychelles-International-Airport	155.6	190	142.5	237.5	NO	NO	-34.4
Tea-Factory-Morne-Blanc	112.9	203.3	152.5	254.1	YES	NO	-90.4
Prison-Montagne-Posee	194.1	193.9	145.4	242.4	NO	NO	0.2
Beau-Vallon-Sewerage-PUC	133.9	180.3	135.2	225.4	YES	NO	-46.4
Barbarons-Biodiversity	129	157.9	118.4	197.4	NO	NO	-28.9
Bois -De-Rose-Maison-Malavois-PUC	122.8	182.8	137.1	228.5	YES	NO	-60.0
Ephelia-Port-Glaud	83	151.9	113.9	189.9	YES	NO	-68.9
Grand-Anse-Waterwork-PUC	72.9	175.5	131.6	219.4	YES	NO	-102.6
La-Misere-Rose	199.7	232.7	174.5	290.9	NO	NO	-33.0
Ma-Constance	161.2	198.1	148.6	247.6	NO	NO	-36.9
Machabee	163.2	159.6	119.7	199.5	NO	NO	3.6
Pointe-Au-Sel	191.6	188.1	141.1	235.1	NO	NO	3.5
Port-Launay-Waterwork-PUC	88.2	140	105.0	175.0	YES	NO	-51.8
Rawinsonde-Station	164.3	162	121.5	202.5	NO	NO	2.3
Roche-Caiman-PUC	98.4	180.7	135.5	225.9	YES	NO	-82.3
La-Digue-Desalination-PUC	102.9	144.6	108.5	180.8	YES	NO	-41.7
La-Digue-Belvue-PUC	117.7	143.2	107.4	179.0	NO	NO	-25.5
Praslin-Mont-Plaisir-PUC	125.8	145.1	108.8	181.4	NO	NO	-19.3
Praslin-Baie-Ste-Anne-PUC	130.5	141.7	106.3	177.1	NO	NO	-11.2
Praslin-Fond-Boffay	145.5	168.4	126.3	210.5	NO	NO	-22.9
Praslin-Desalination-PUC	121.3	139	104.3	173.8	NO	NO	-17.7
Praslin-Salazie-PUC	164	162.2	121.7	202.8	NO	NO	1.8
Vallee-De-Mai-Shelter	162.5	164.8	123.6	206.0	NO	NO	-2.3
Vallee-De-Mai-Viewing-Lodge	161.5	172.7	129.5	215.9	NO	NO	-11.2

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

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



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

Figure 4 above shows that during the month of April a maximum of 39.3 mm of rainfall was recorded at the Airport station with a total of 11 dry days. The relative humidity mostly remained below 80% with a minimum of 72% recorded on the 28<sup>th</sup> and a maximum of 84% recorded on the 11<sup>th</sup>. The daily maximum temperature was well above 30.0°C for most days. The hottest temperature for the month was 33.7°C recorded on the 28<sup>th</sup> and 29<sup>th</sup>, while the highest and lowest daily minimum was 24.0°C and 27.8°C respectively.

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

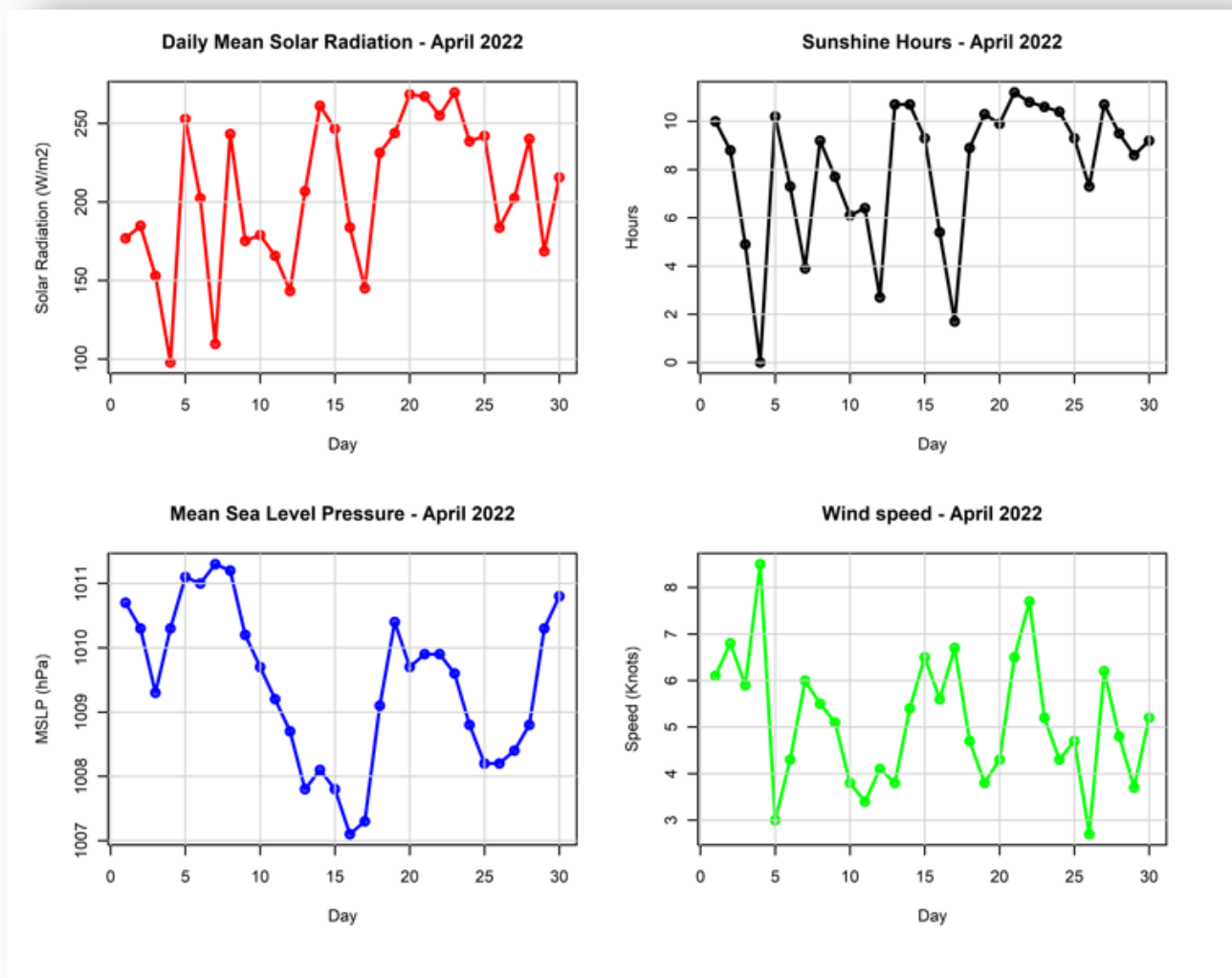
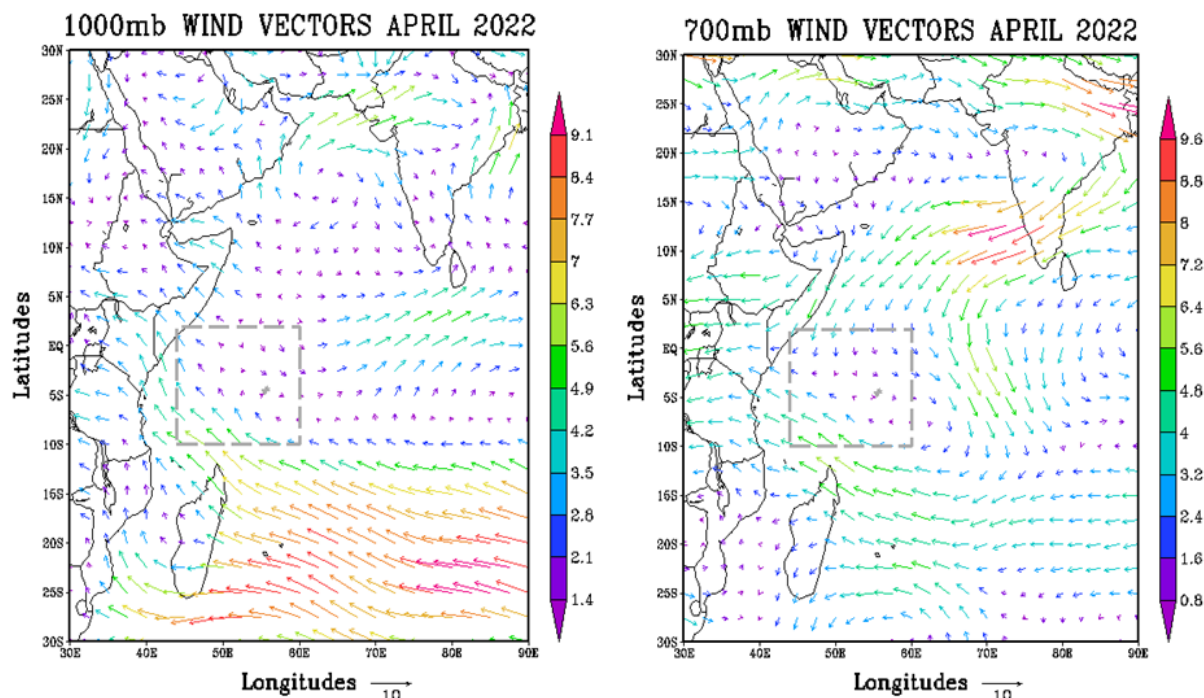


Figure 5: Daily solar Radiation, Sunshine hours, Mean Sea Level Pressure, and Surface wind speeds in April 2022

On average, the mean solar radiation during April remained mostly above 150 W/m<sup>2</sup> as a result of the increase in sunshine hours which peaked at 11.2 hrs recorded on the 21<sup>st</sup> of April. The Mean Sea Level Pressure varied between 1011.3 hpa and 1007.1 hpa with the maximum recorded on the 4<sup>th</sup> and minimum recorded on the 16<sup>th</sup> of April. Calm to moderate winds prevailed during the month with a maximum of 8.5 Knots (~15.7 Km/hr) and minimum of 2.7 Knots (~5.0 Km/hr) recorded on the 4<sup>th</sup> and 26<sup>th</sup> respectively.



## 4. Wind Patterns in April 2022



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

The analysis (Figure 6) indicates that the winds near the surface were mainly light South-easterlies ranging between 2-6m/s and converging near the equator across the basin. A weak Arabian high pressure system is also present to the far northern parts of the basin introducing some strong convergence over the Asian continent.

The winds at the steering level were light North-westerly with a speed of less than 5m/s originating from the weak Arabian High while a cyclonic circulation persisted to the immediate south-east of Mahe.