

Climate and Weather Bulletin





SEYCHELLES METEOROLOGICAL AUTHORITY

September 2022 Climate and Weather Bulletin



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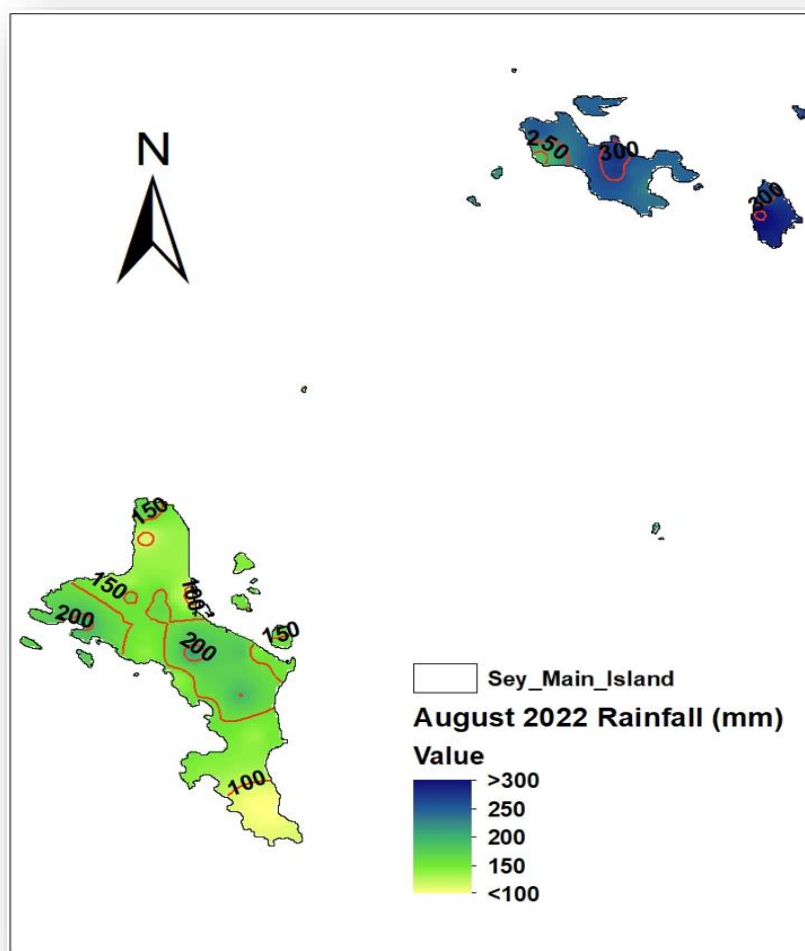
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1. Introduction

This bulletin reviews climate conditions over Mahe, Praslin, and La Digue and highlights the status of the climate systems during the month of August 2022. Most of the convective activities remained north of the Seychelles. However, periodic relaxation of the Indian Ocean high allowed the Near Equatorial Trough Axis to shift south, giving a considerable amount of rainfall particularly over Praslin and La Digue.

2. Rainfall Performance in August 2022

2.1 Spatial Rainfall Distribution for August 2022



The spatial rainfall distribution for August (Figure 1) shows that most of the rainfall fell over Praslin and La Digue, with amounts exceeding 250mm over most part of these two Islands. On the main Island Mahe, rainfall concentrated around the central and northern part of the Island keeping the southern tip relatively drier. The distribution can be explained by the periodic shift of the Near Equatorial Trough from the north, therefore its effect was mostly felt over the northern part of the Inner Islands. Although the monthly total shows a significant amount of rainfall, the temporal distribution was very poor. Most of the rainfall was recorded over a few days of rainfall

Figure 1: August 2022 Spatial Rainfall Distribution

Comparing the rainfall recorded at the 37 stations to their respective long-term mean during the month of August (Figure 2) shows that the rainfall was above average over most stations.

Table 1 summarizes August's rainfall performance. Out of the 37 stations, 21 recorded Above Normal rainfall with relatively high positive anomalies, particularly over the stations on Praslin and La Digue. 14 stations recorded Near-Normal and the remaining two stations, Belombre and Anse Forbans recorded Below-Normal condition .

In terms of percentages, Figure 3 shows that all parts of the three main Islands, except over the south and northwest tip of Mahe recorded rainfall exceeding more than 100% of the Long Term Mean.

2.2 August Rainfall Totals Compared to Long-Term Mean

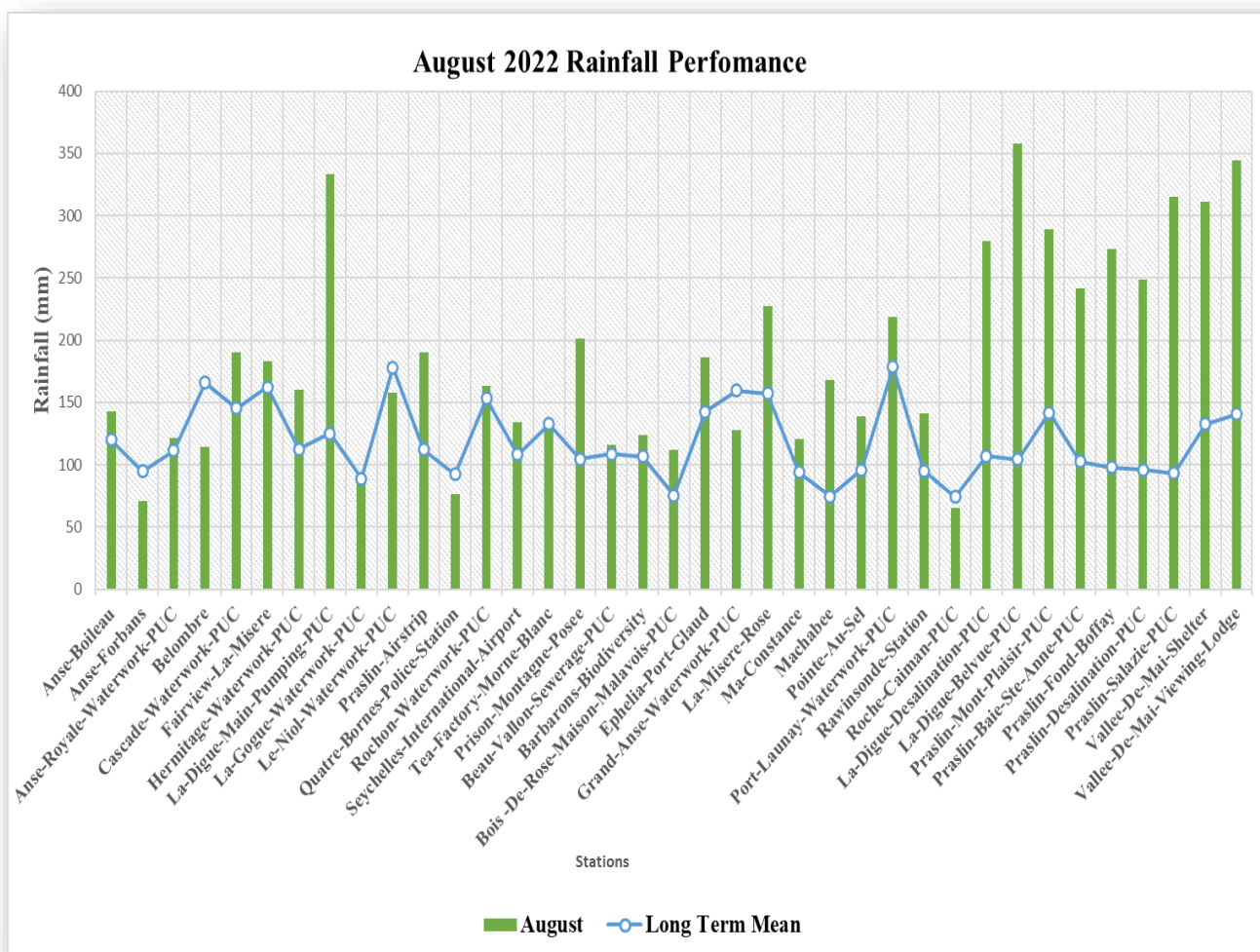


Figure 2: August 2022 Rainfall totals compared to the long-term mean

2.3 Percentage of Mean Rainfall for August 2022

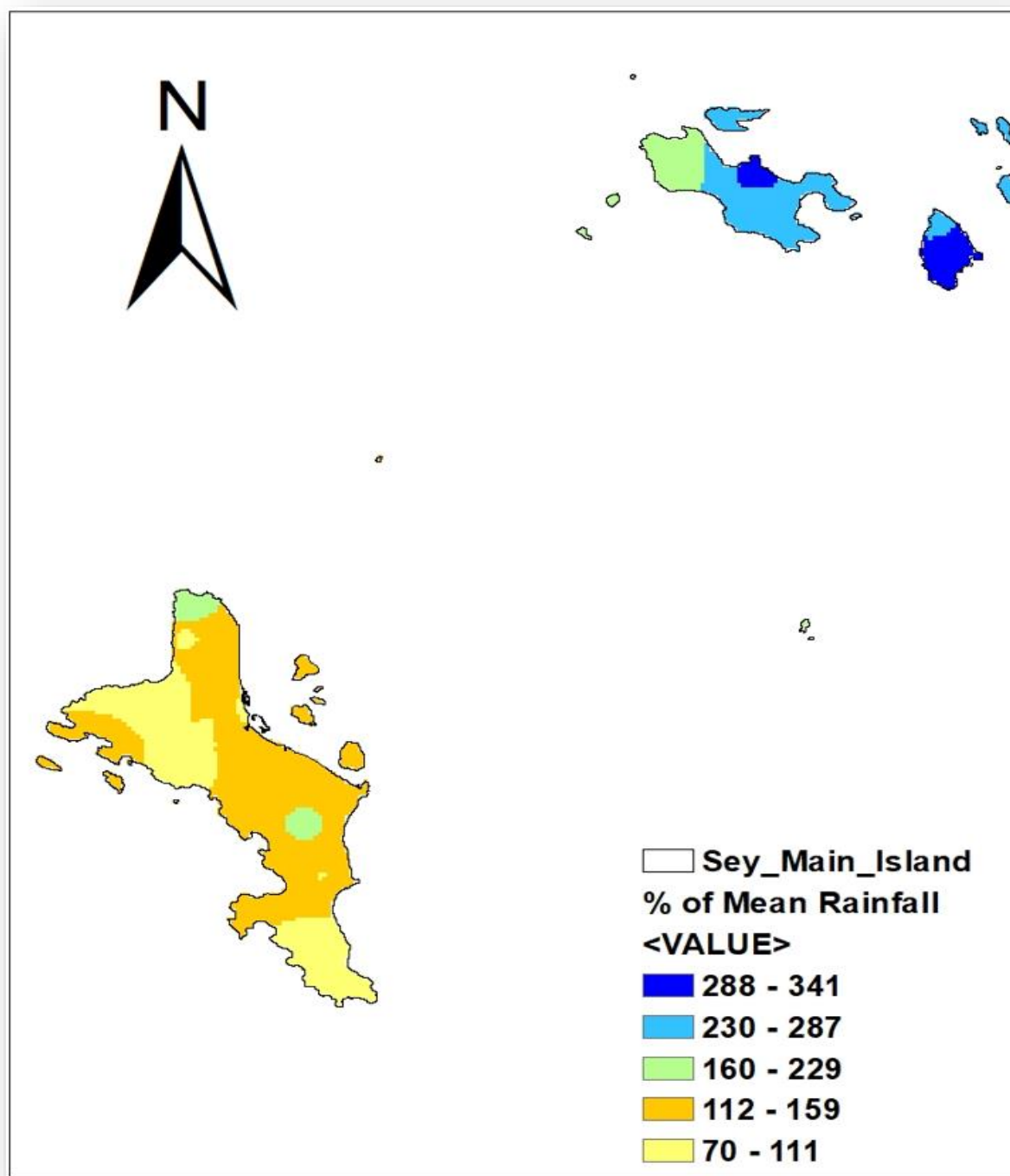


Figure 3: Percentage of mean Rainfall for August 2022

Table 1: Rainfall performance in August

Stations	August	Long Term Mean	BN	AN	BN?	AN?	Anomalies
Anse-Boileau	142.7	120.2	90.2	150.3	NO	NO	22.5
Anse-Forbans	71.0	94.9	71.2	118.6	YES	NO	-23.9
Anse-Royale-Waterwork-PUC	121.4	111.2	83.4	139.0	NO	NO	10.2
Belombre	114.6	165.9	124.4	207.4	YES	NO	-51.3
Cascade-Waterwork-PUC	189.9	145.5	109.1	181.9	NO	YES	44.4
Fairview-La-Misere	183.2	162.2	121.7	202.8	NO	NO	21.0
Hermitage-Waterwork-PUC	160.5	112.6	84.5	140.8	NO	YES	47.9
La-Digue-Main-Pumping-PUC	333.0	125.3	94.0	156.6	NO	YES	207.7
La-Gogue-Waterwork-PUC	90.1	88.8	66.6	111.0	NO	NO	1.3
Le-Niol-Waterwork-PUC	157.9	178.2	133.7	222.8	NO	NO	-20.3
Praslin-Airstrip	190.5	112.1	84.1	140.1	NO	YES	78.4
Quatre-Bornes-Police-Station	76.5	92.5	69.4	115.6	NO	NO	-16.0
Rochon-Waterwork-PUC	163.2	153.3	115.0	191.6	NO	NO	9.9
Seychelles-International-Airport	134.0	108.4	81.3	135.5	NO	NO	25.6
Tea-Factory-Morne-Blanc	136.5	132.9	99.7	166.1	NO	NO	3.6
Prison-Montagne-Posee	200.9	104.5	78.4	130.6	NO	YES	96.4
Beau-Vallon-Sewerage-PUC	116.2	108.7	81.5	135.9	NO	NO	7.5
Barbarons-Biodiversity	124.0	106.8	80.1	133.5	NO	NO	17.2
Bois -De-Rose-Maison-Malavois-P	111.8	75.5	56.6	94.4	NO	YES	36.3
Ephelia-Port-Glaud	185.9	142.6	107.0	178.3	NO	YES	43.3
Grand-Anse-Waterwork-PUC	127.9	159.5	119.6	199.4	NO	NO	-31.6
La-Misere-Rose	227.2	157.3	118.0	196.6	NO	YES	69.9
Ma-Constance	120.3	93.8	70.4	117.3	NO	YES	26.5
Machabee	168.3	74.7	56.0	93.4	NO	YES	93.6
Pointe-Au-Sel	139.1	95.8	71.9	119.8	NO	YES	43.3
Port-Launay-Waterwork-PUC	218.4	178.4	133.8	223.0	NO	NO	40.0
Rawinsonde-Station	140.9	95	71.3	118.8	NO	YES	45.9
Roche-Caiman-PUC	65.5	74.3	55.7	92.9	NO	NO	-8.8
La-Digue-Desalination-PUC	279.7	107	80.3	133.8	NO	YES	172.7
La-Digue-Belvue-PUC	357.5	104.4	78.3	130.5	NO	YES	253.1
Praslin-Mont-Plaisir-PUC	289.3	141.7	106.3	177.1	NO	YES	147.6
Praslin-Baie-Ste-Anne-PUC	241.7	102.7	77.0	128.4	NO	YES	139.0
Praslin-Fond-Boffay	273.4	98.1	73.6	122.6	NO	YES	175.3
Praslin-Desalination-PUC	248.7	96.1	72.1	120.1	NO	YES	152.6
Praslin-Salazie-PUC	315.4	93.4	70.1	116.8	NO	YES	222.0
Vallee-De-Mai-Shelter	311.0	132.9	99.7	166.1	NO	YES	178.1
Vallee-De-Mai-Viewing-Lodge	344.0	140.7	105.5	175.9	NO	YES	203.3

3. Daily Weather for August 2022 at the Seychelles International Airport

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

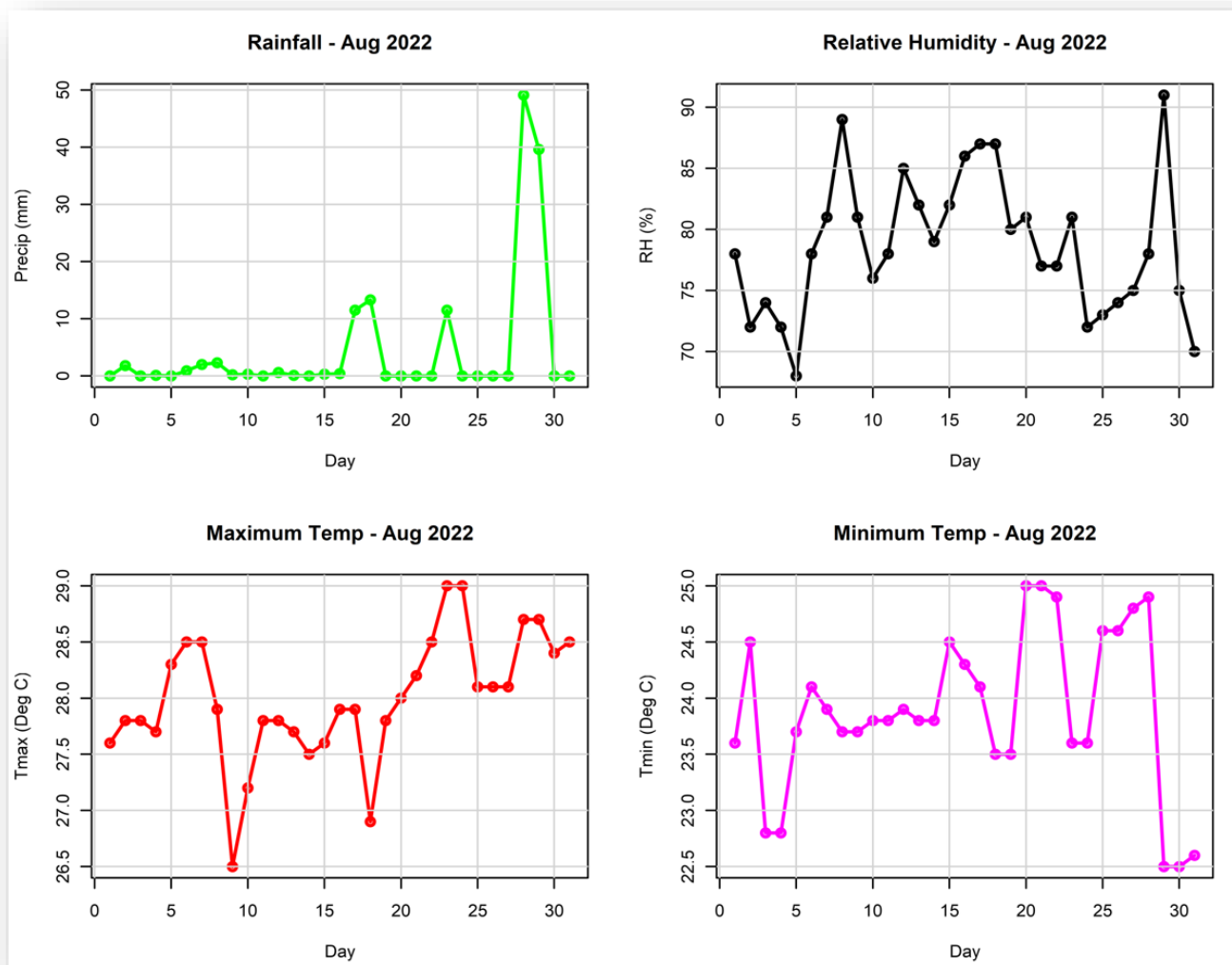


Figure 4: Daily rainfall, relative humidity, maximum and minimum temperatures in August 2022

The highest recorded daily rainfall in August at the Airport Station was 49.1 mm recorded on the 28th, with 16 dry days during the month. The average daily Relative Humidity was at 79%, while the highest and lowest was 91 and 68% respectively. The daily maximum temperature generally remained above 27.5°C, with the highest at 29°C reported on the 23rd and 24th. The minimum temperature meanwhile varied between 22.5 and 25°C.

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

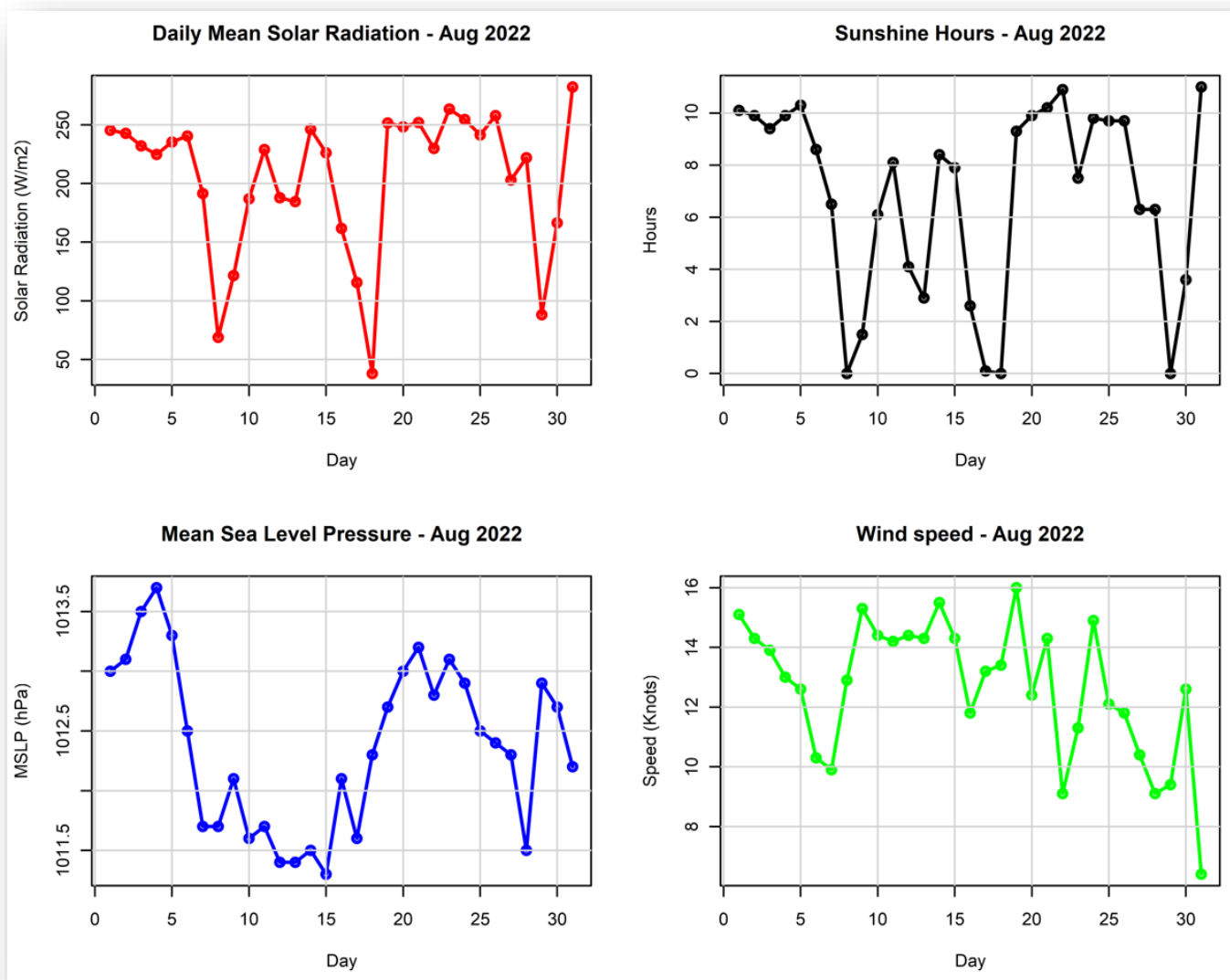


Figure 5: Daily solar Radiation, Sunshine hours, Mean Sea Level Pressure, and Surface wind speeds in August 2022

On average, the mean solar radiation during the month of July remained mostly above 150 W/m², and the diurnal variation closely matched the sunshine hours. The mean sea level pressure showed a negative trend ranging between 1011.3 to 1013.7hPa (Figure 5). A gradual decrease in the wind speeds was apparent during the month of August with an average of 7 Knots (13Km/hr)

4. Wind Patterns in August 2022

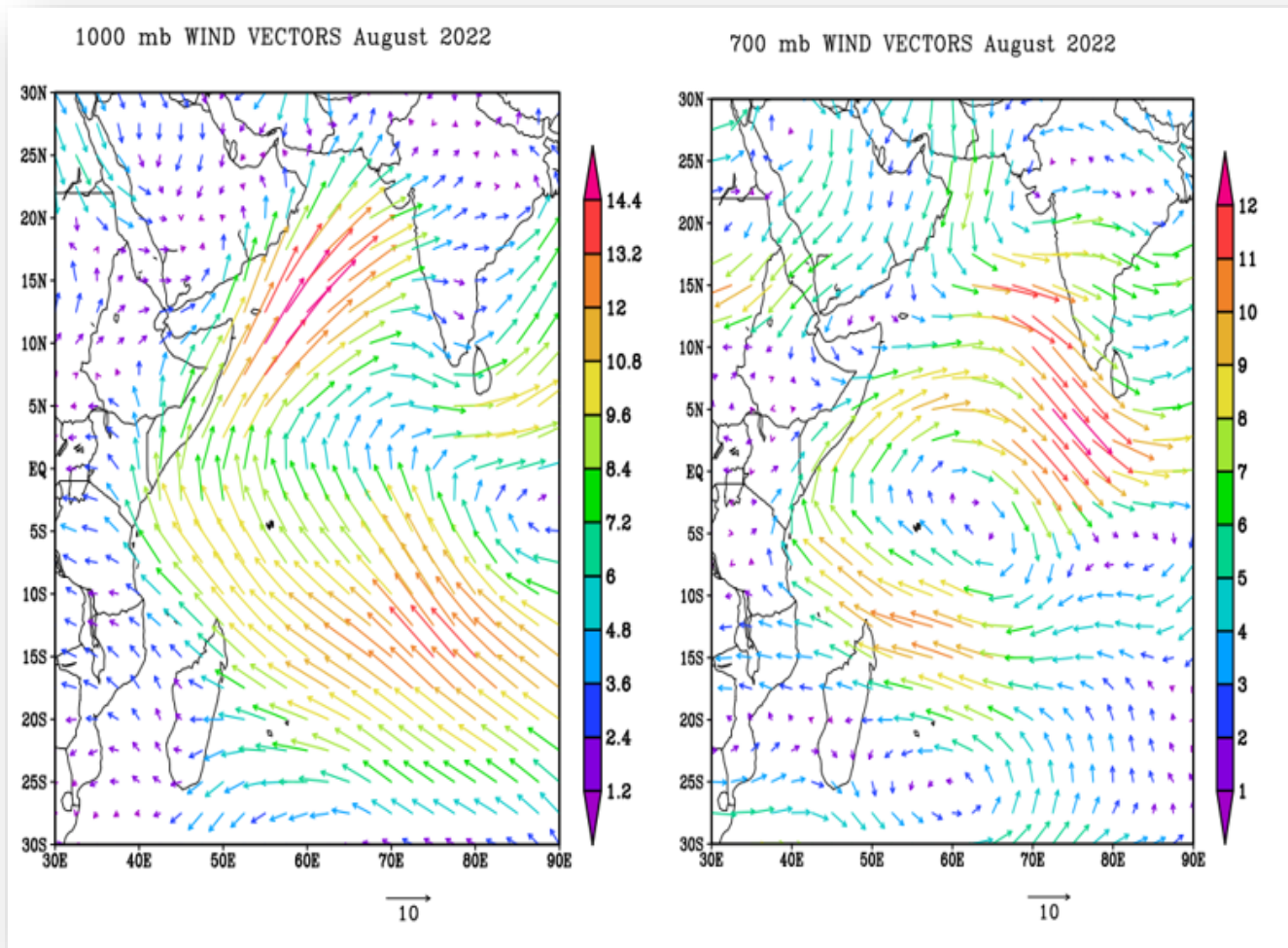


Figure 6: Surface wind flow (left) and wind flow at 700mb (right)

The analysis (Figure 6) indicates that at the surface (1000mb), the Near Equatorial Trough Axis remains tilted towards the north with winds accelerating away from the equator. This configuration meant that most convective activities associated with the trough remained to the north of the Inner Islands for a better part of the month. However, at the medium level (700mb) a low-pressure circulation can be seen with its center to the immediate northeast of the main Islands. The system enhanced the moisture content at the medium level, producing medium level clouds which contributed to the lower sunshine hours on some particular days of the month.