



CLIMATE SUMMARY FOR GITEGA - SEPTEMBER 2024

1. DAILY TIME SERIES

1.1. Maximum, Average and minimum daily temperature

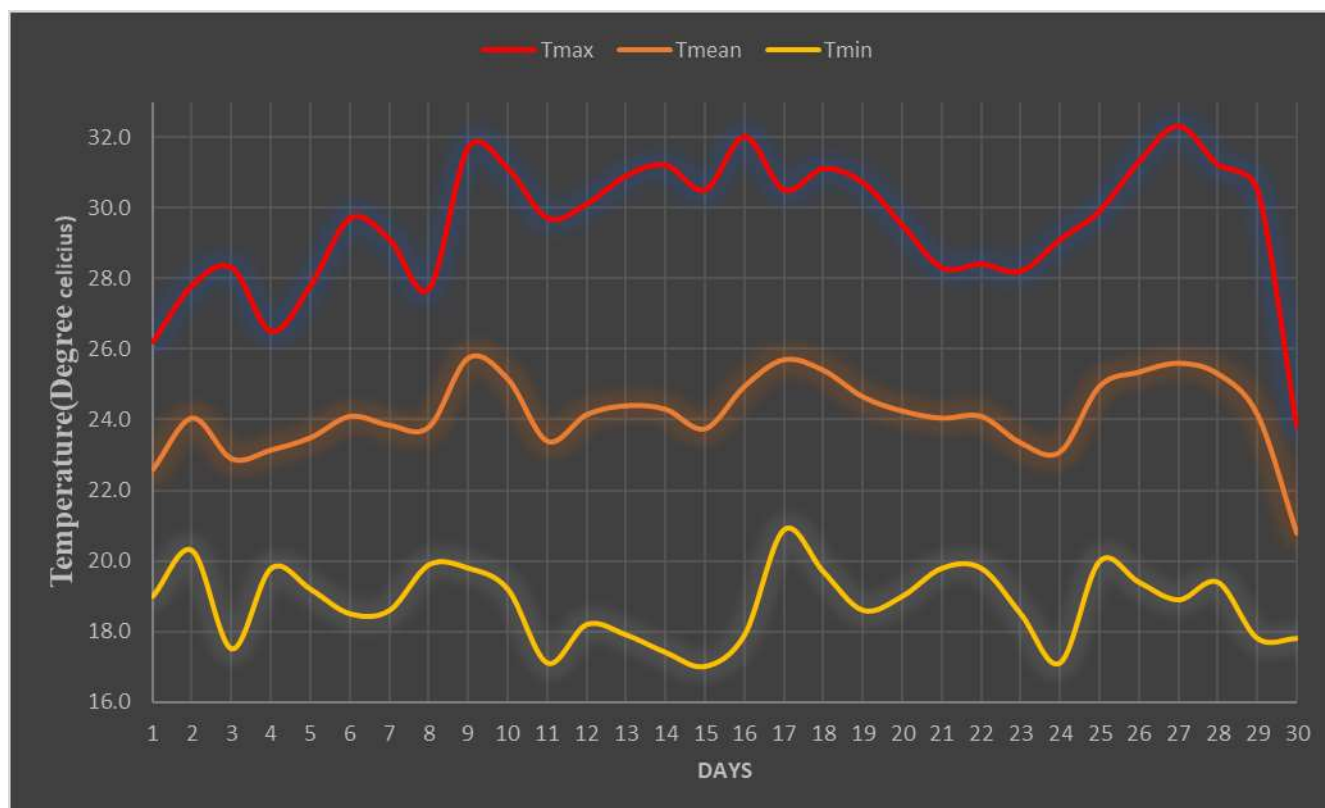


Figure 1: Tmax, Tmean and Tmin.

In September 2024, Gitega station encountered a variety of weather conditions, marked by fluctuations in temperature between warm and cool days. During this month, 15 days had average temperatures below the overall monthly average of 24.2°C, while 13 days recorded average temperatures below this monthly figure. Notably, on 12 and 29 September, 2024 the average temperature matched the monthly average.



1.2.Daily Precipitation

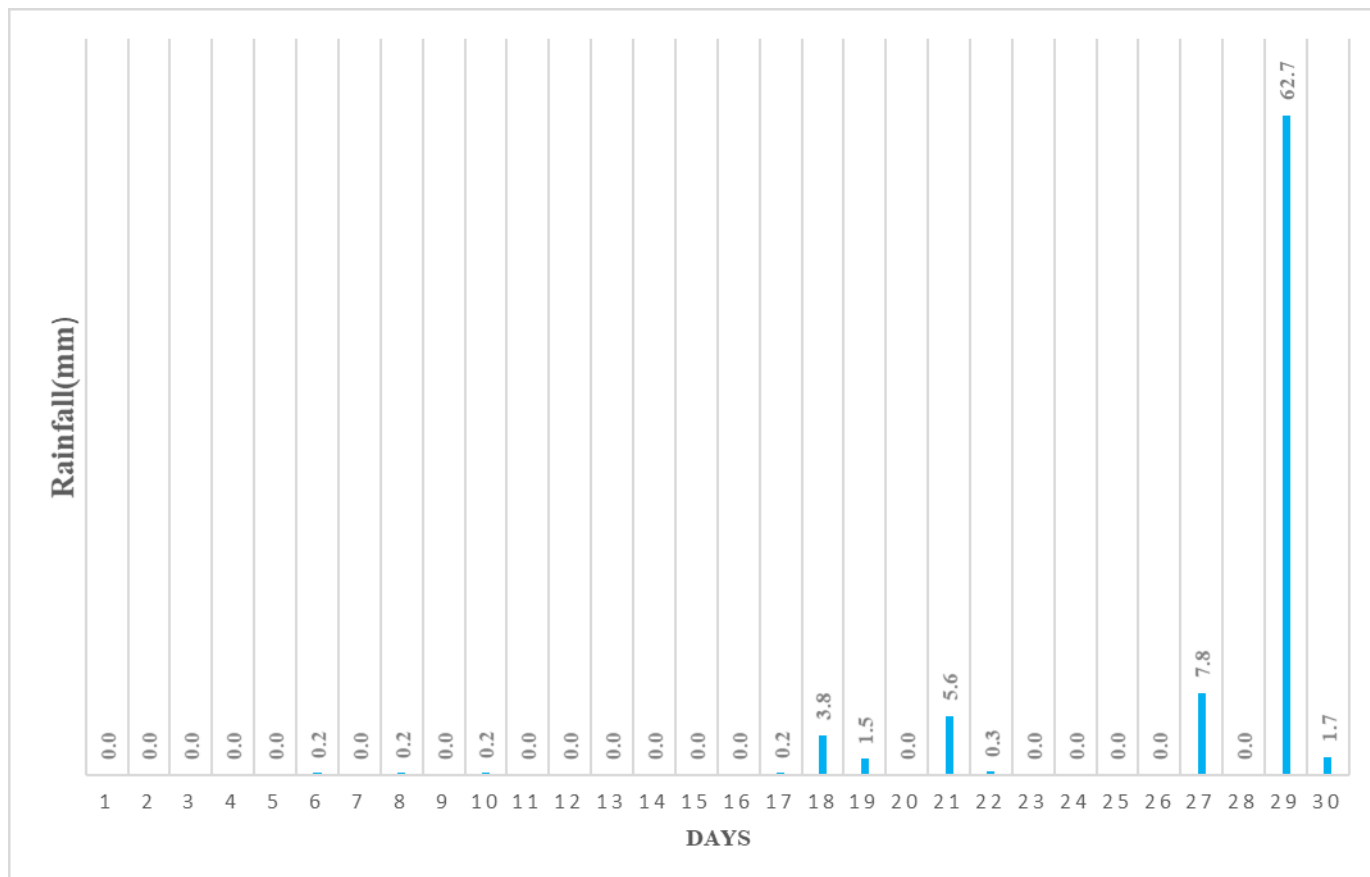


Figure 2: Rainfall

In September, rainfall was low during the first two dekads of the month, but it increased significantly in the last dekad. Notably, on September 29, 2024, an intense rainfall of 62.7mm was recorded within just three hours.



1.3. Average Relative humidity

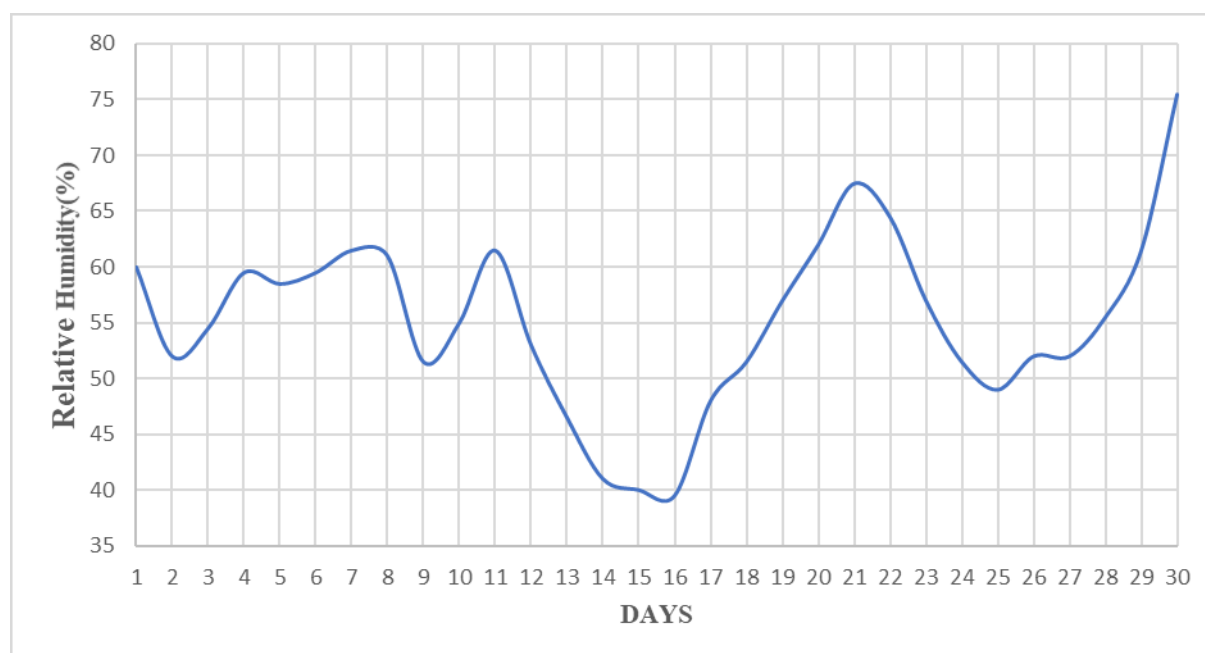


Figure 3: Average Relative humidity

In September, Gitega station experienced moderate relative humidity levels averaging 55%. During this month, 13 days we recorded humidity below the monthly average, while 15 days exceeded it. Remarkably, on 3 and 10 September 2024, the humidity levels were equal to the monthly average.



1.4.Sunshine hours

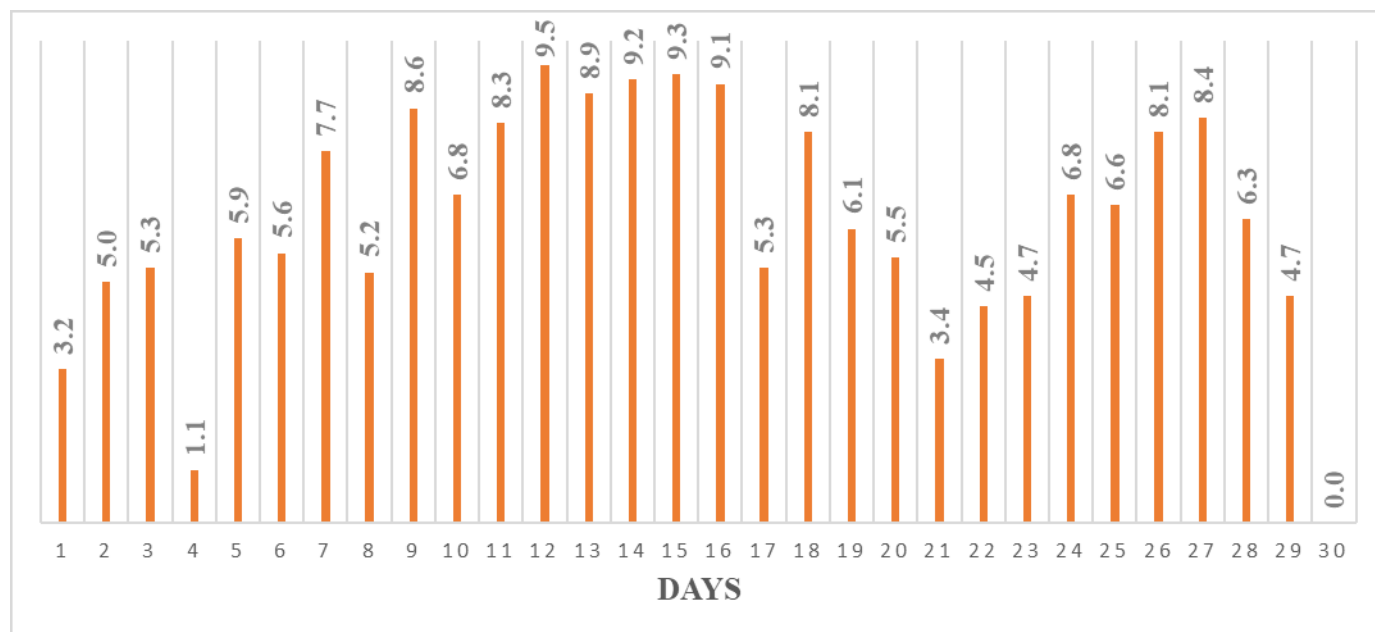


Figure 4: Sunshine hours

The average sunshine duration in September was about 6 hours per day, with more hours recorded in the afternoon compared to the morning. There were 14 days with average sunshine below the monthly average, and particularly on September 30, no sunshine was recorded.



2. CLIMATE EXTREMES

Warmest day	27/09/2024	32.3⁰C
Coldest night	15/09/2024	17.0⁰C
Wettest day	29/09/2024	62.7mm
Sunniest day	12/09/2024	9.5 hours

Table 1: Climate Extremes



3. CLIMATE STATISTICS

3.1. Temperature

Parameters	Actual temperature(°C)	Anomaly(°C) (1991-2020)	Rank		Series length (1983-2024)
			warmest	coldest	
Mean Maximum Temperature	29.5	1.1	4	39	42
Mean Temperature	24.2	1.8	1	42	42
Mean Minimum Temperature	18.8	2.4	1	42	42

Table 2: Long-term temperature statistics.

3.2. Rainfall

Actual Rainfall	Average (%) (1991-2020)	Rank		Series length (1991-2024)
		Wettest	driest	
82.4 mm	- 4.7%	14	21	34

Table 3: Long-term rainfall statistics.



3.3.Sunshine

Actual sunshine hours	Average (%) (1991-2020)	Rank		Series length (2010-2024)
		Sunniest	Coldest	
187.2	20.12%	1	5	5

Table 4:Long-term sunshine statistics

Note:

- From 2010 to 2024, several months had missing sunshine hours data. As a result, the average, anomaly, and rank have been calculated based only on the months with available data. As indicated in Table 4, only five years within the mentioned period recorded sunshine hour data for September.