



WEATHER DATA COLLECTED DURING THE SUMMER 2024  
SEASON AT GITEGA METEOROLOGICAL ST ATION.

THIRD MONTH

**AUG**

PREPARED BY DATA OBSERVATION GITEGA TEAM.

1. BIKORIMANA CHRISTIAN
2. MUNYESHYAKA LEONARD
3. MUREBWAYIRE UYIZERA MACRINE
4. UWERA ALINE



## Contents

<b>LIST OF FIGURES .....</b>	<b>ii</b>
<b>LIST OF TABLES .....</b>	<b>ii</b>
<b>CHAPTER 1: WEATHER DATA FOR THE MONTH OF AUGUST .....</b>	<b>1</b>
<b>1.1. MAXIMUM AND MINIMUM TEMPERATURE AND RAINFALL. ....</b>	<b>1</b>
<b>1.2. OTHER SIGNIFICANT DATA.....</b>	<b>1</b>
<b>1.3. SOIL TEMPERATURES .....</b>	<b>1</b>
<b>1.4. PICHE AND BAC EVAPORATION .....</b>	<b>2</b>
<b>1.5. INSOLATION .....</b>	<b>2</b>



## LIST OF FIGURES

Figure 1.1: Variation of Soil temperature during a day. ....2

## LIST OF TABLES

Table 1.1: Temperature and Total Rainfall. ....1

Table 1.2: Summary of Maximum and Minimum Observed Data. ....1

Table 1.3: The Mean soil temperatures. ....1

Table 1.4: BAC and Piche Evaporation. ....2

Table 1.5: Insolation. ....2



## CHAPTER 1: WEATHER DATA FOR THE MONTH OF AUGUST

This chapter provides an overview of the observed data, emphasizes the key findings, and illustrates the weather patterns for the month of August 2024.

### 1.1. MAXIMUM AND MINIMUM TEMPERATURE AND RAINFALL.

Average Maximum and Minimum temperature and total rainfall of August are summarized in Table 1.1.

Average temperature	Maximum temperature	Minimum temperature	Total rainfall
23.1 <sup>0</sup> C	28.33 <sup>0</sup> C	17.9 <sup>0</sup> C	49 mm

Table 1.1: Temperature and Total Rainfall.

### 1.2. OTHER SIGNIFICANT DATA

PARAMETER	VALUE	DAY
Highest Maximum temperature	30.6 <sup>0</sup> C	28/08/2024
Lowest Maximum temperature	24.3 <sup>0</sup> C	22/08/2024
Highest Minimum temperature	20.3 <sup>0</sup> C	10/08/2024
Lowest Minimum temperature	15.8 <sup>0</sup> C	23/08/2024
Highest Rainfall	16,7 mm	11/08/224
Highest minimum Grass temperature	18.4 <sup>0</sup> C	10/082024
Average Grass minimum temperature	15.2 <sup>0</sup> C	N/A
Lowest Minimum Grass temperature	11.2 <sup>0</sup> C	06/08/2024
Highest Insolation	9 Hours 12min	04/08/2024
Lowest Insolation	36 min	01/08/2024
Highest Piche evaporation	8.8 mm	6/08/2024
Lowest Piche evaporation	2.9 mm	16/08/2024
Highest BAC evaporation	5.9 mm	05/08/204
Lowest BAC evaporation	2.3 mm	01/08/2024

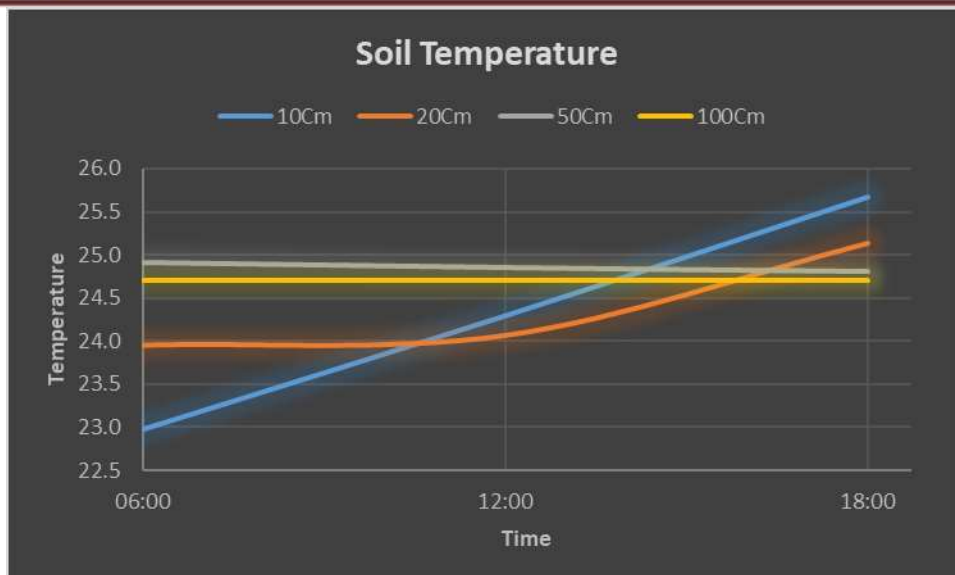
Table 1.2: Summary of Maximum and Minimum Observed Data.

### 1.3. SOIL TEMPERATURES

Table 1.3 summarizes the average temperatures recorded by various soil thermometers at 6:00 AM, 12:00 PM, and 18:00 PM.

HEIGHT	06:00	12:00	18:00
10Cm	22.7	24.1	25.4
20Cm	23.7	23.8	24.8
50Cm	24.7	24.7	24.6
100Cm	24.6	24.6	24.6

Table 1.3: The Mean soil temperatures.



*Figure 1.1: Variation of Soil temperature during a day.*

#### 1.4. PICHE AND BAC EVAPORATION

Table 1.4 displays the average evaporation rate at Piche and BAC.

EVAPORATION TIME	PICHE	BAC
18H00-06H00	23.1	17.4
08H00-08H00	5.9	3.8
06H00-18H00	3.6	3.8

**Table 1.4: BAC and Piche Evaporation.**

#### 1.5. INSOLATION

Table 1.5 provides a summary of the recorded insolation for the month of August.

	AM	PM	TOTAL
TOTAL	98 hours 12min	99 hours 42min	197 hours 54min
AVERAGE	3h 10min	3h 13min	6 hours 23min

**Table 1.5: Insolation**