



Highlights:

- **The cumulative rainfall for October_2017** was normal at representative stations except for central and northern part.
- **The soil moisture** index shows a decreased soil moisture for the third and last dekad of October_2017 due to decreased rainfall patterns as opposed to the first two dekads of the October.
- **The rainfall during November _2017 is expected to remain normal within the Long Term Mean** over most parts of the country.

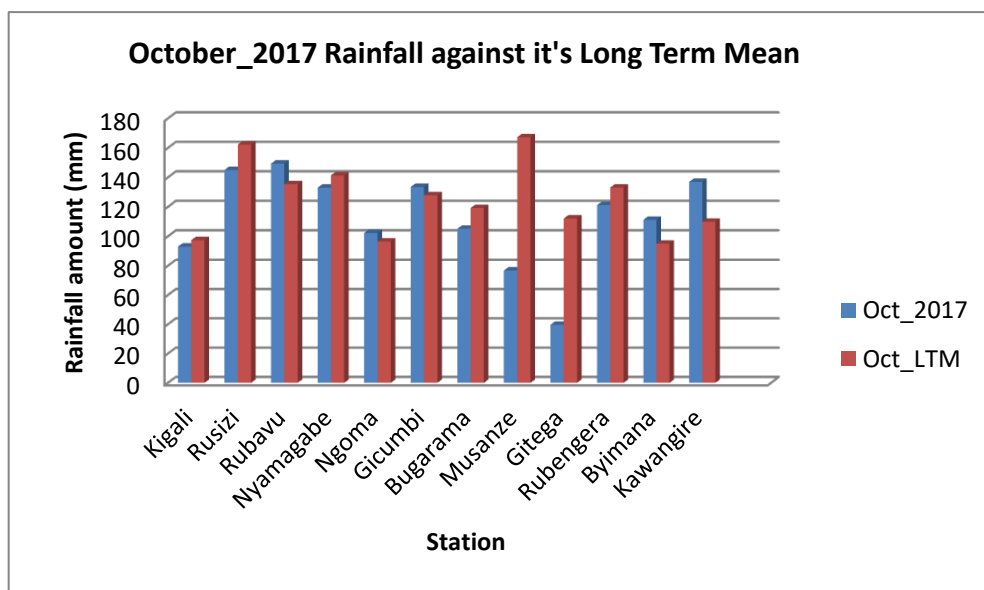
I. Introduction

The cumulative rainfall of October_2017 shows rainfall within the range of Long Term Mean (LTM) except at some localized stations in Kigali City (Gitega station) and the North (Musanze station) where rainfall was far below the LTM during the month of October 2017.

a) The table and histogram below indicates the rainfall recorded during October_2017:

Cumulative rainfall (in mm) recorded at different stations

Station	Oct_2017	Oct_LT M
Kigali	93.0	97.4
Rusizi (Kamembe)	145.0	162.2
Rubavu (Gisenyi)	149.3	135.3
Nyamagabe (Gikongoro)	133.0	141.3
Ngoma (Kibungo)	102.3	96.5
Gicumbi (Byumba)	133.5	127.8
Bugarama	105.1	119.2
Musanze (Ruhengeri)	76.7	167.2
Gitega	39.6	112.1
Rubengera	121.1	133.1
Byimana	111.2	95.0
Kawangire	136.9	109.9

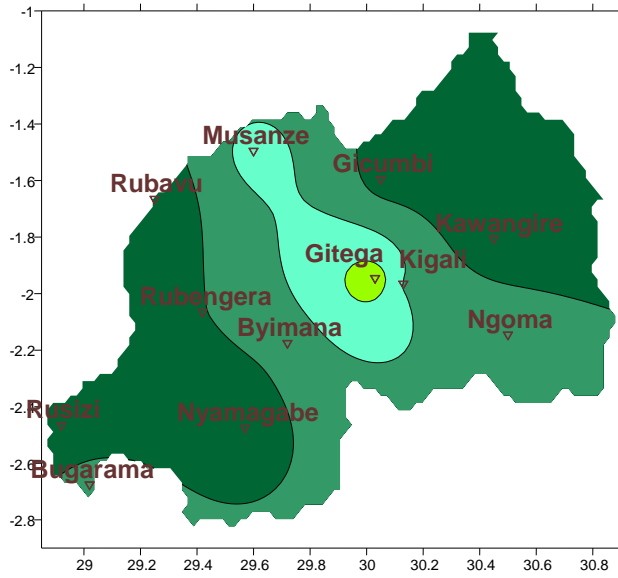


Plot1

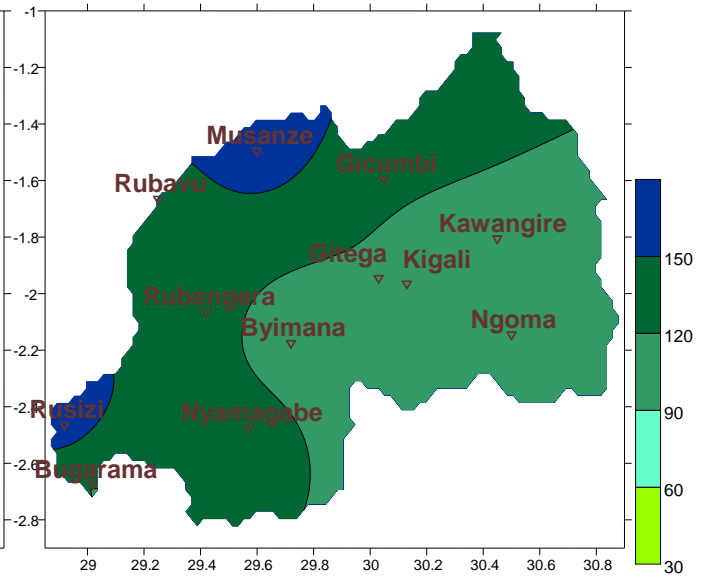
Table1

b) **Rainfall analysis:** The maps “Map 1 and 2” below show the cumulative rainfall recorded during October_2017 and the LTM cumulative rainfall for the same period. The maps “map 3 and 4” show the cumulative rainfall recorded during September_2017 and the cumulative rainfall for the same period.

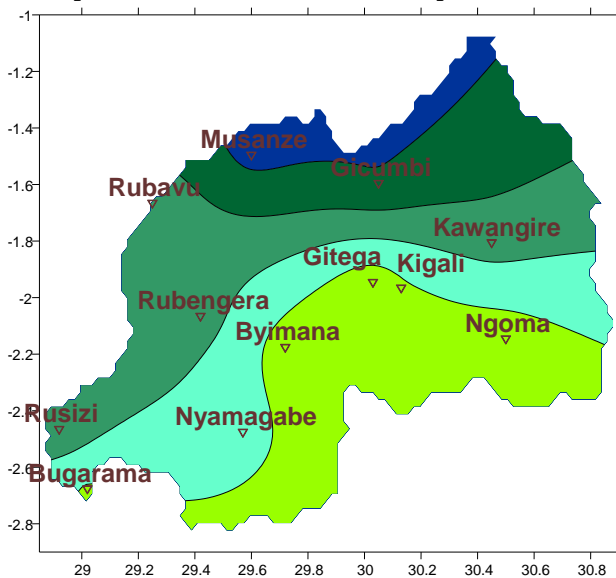
Map1: Total Rainfall (mm): 1st-31st Oct_2017



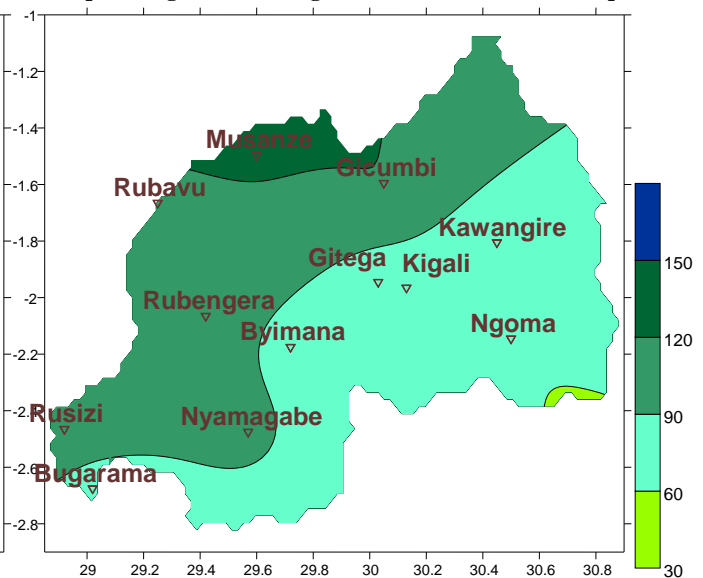
Map2: Long Term Average Rainfall (mm): 1st-31st Oct_LTM



Map3: Total Rainfall (mm): 1st-30th Sep_2017



Map4: Long Term Average Rainfall (mm): 1st-30th Sep_LTM

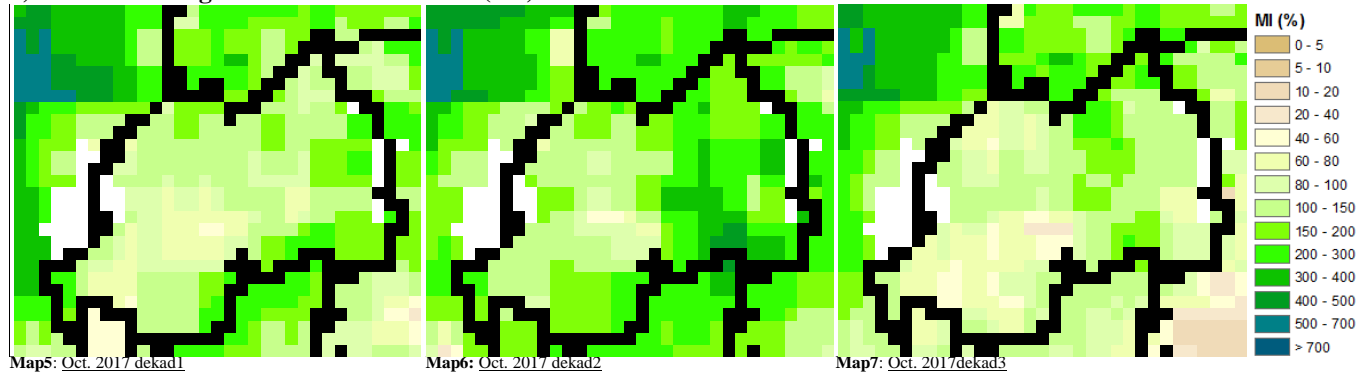


II. Detailed observed rainfall during the month of October 2017

October_2017 was within the normal range of the LTM except for the northern tip where rainfall was slightly high and the southern parts of the country where it was low in comparison to the LTM (see **Map.3&4** and **Table1**). Contrary to September_2017 rainfall pattern was slightly below the LTM especially within the central toward northern parts of the country (see **Map1&2** and **Table1**)

III. Agricultural impact.

a) Satellite images: Soil Moisture Index (MI)



The soil moisture index shows a decrease in soil moisture for the third and last dekad of October_2017 due to the slight decrease in rainfall occurrence during third dekad as opposed to the first two dekads of October. But comparatively the soil was fairly wet (MI>80) for sustainability of some plants.

For November_2017, we expect rain to continue moistening the soil; but will remain normal within the range of LTM for most parts of the country however the northern will experience a slightly more rainfall amount as opposed to parts of the country. The farmers are advised to take advantage of the wet season we are experiencing.

b) Rainfall forecast for November 2017

October 2017, we expect rain to continue for the whole month of November it is expected to be within the range of LTM over most parts of the country.

N.B: This forecast should be used in conjunction with the daily (24-hour), Three (3), Five (5) and Seven (7) days forecasts issued by the Rwanda Meteorology Agency (Meteo Rwanda)