



Highlights:

- **Cumulative rainfall** for the month of October 2016 was **within the mean range in many parts** of the country except the **south-eastern part that had below the mean range**;
- **An increase of soil moisture content** was observed in the 3rd and last dekad of October 2016 in all parts of the country within the last dekad; especially the northern part.
- **Rainfall cessation** expected at different stations at the end of this month of November 2016 (especially east and central)

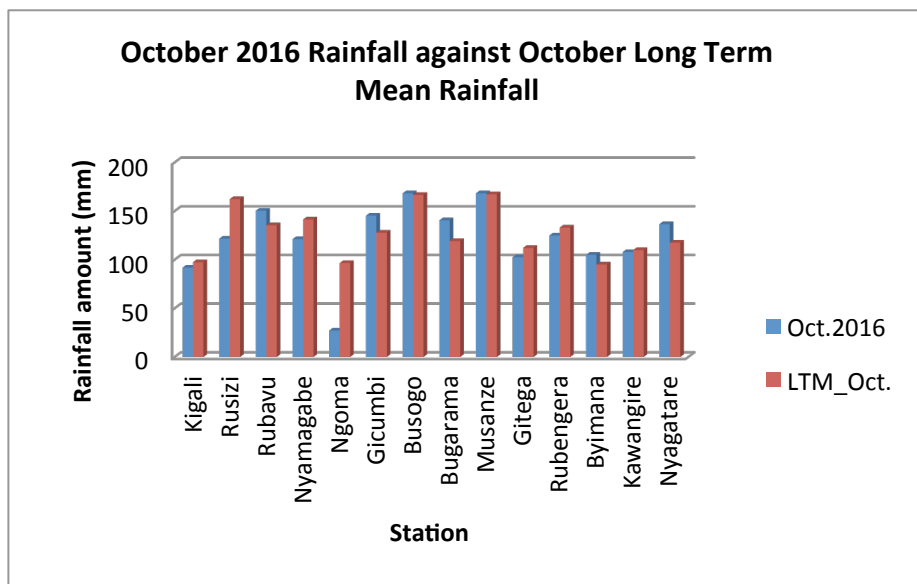
I. Introduction

a) The comparison between rainfall recorded in “October_2016” and it’s long-term mean (LTM) value at each station, is shown below:

Cumulative rainfall (in mm) recorded at different stations

Station	Oct.2016	LTM_Oct.
Kigali	91.8	97.4
Rusizi (Kamembe)	121.6	162.2
Rubavu (Gisenyi)	150.4	135.3
Nyamagabe (Gikongoro)	121.1	141.3
Ngoma (Kibungo)	27.2	96.5
Gicumbi (Byumba)	145.2	127.8
Busogo	168.2	166.6
Bugarama	140.4	119.2
Musanze (Ruhengeri)	168.2	167.2
Gitega	102.7	112.1
Rubengera	124.8	133.1
Byimana	104.9	95
Kawangire	107.8	109.9
Nyagatare	136.5	117.5

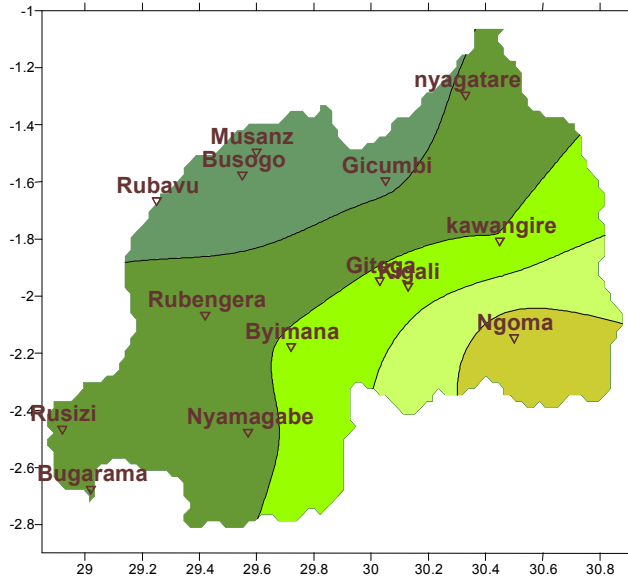
Table1



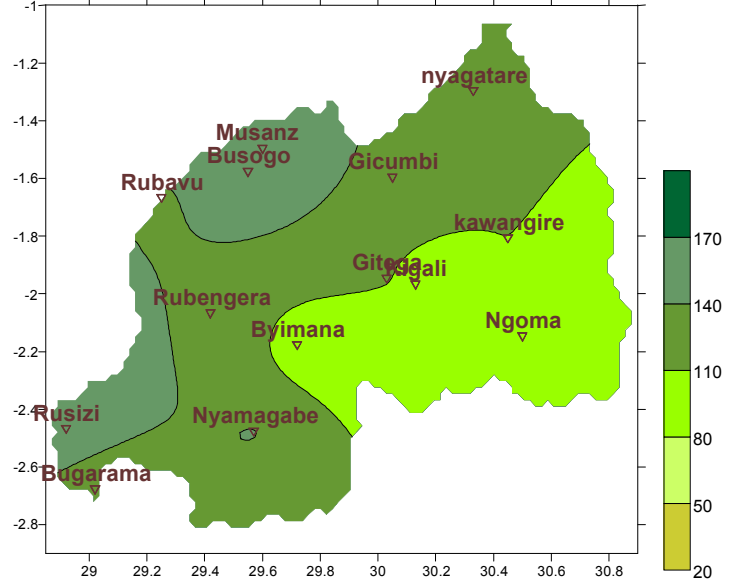
Plot1

b) **Rainfall analysis:** The next maps show the rainfall recorded during specific period monitored with the same dekad at long term average (mean)

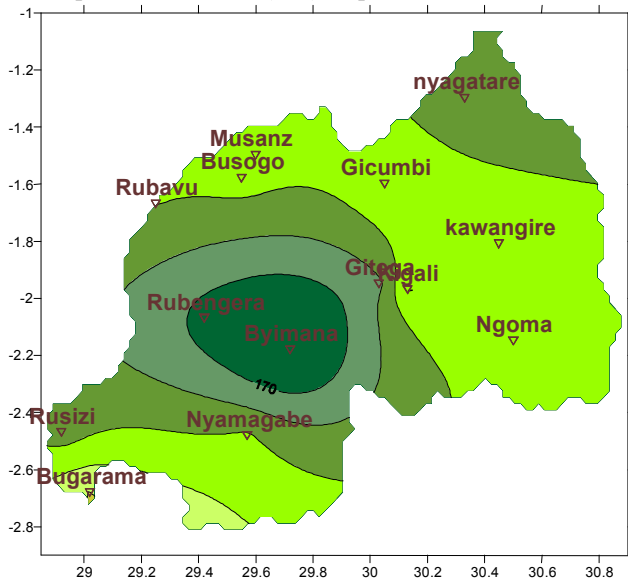
Map1: Total Rainfall (mm): Oct.2016



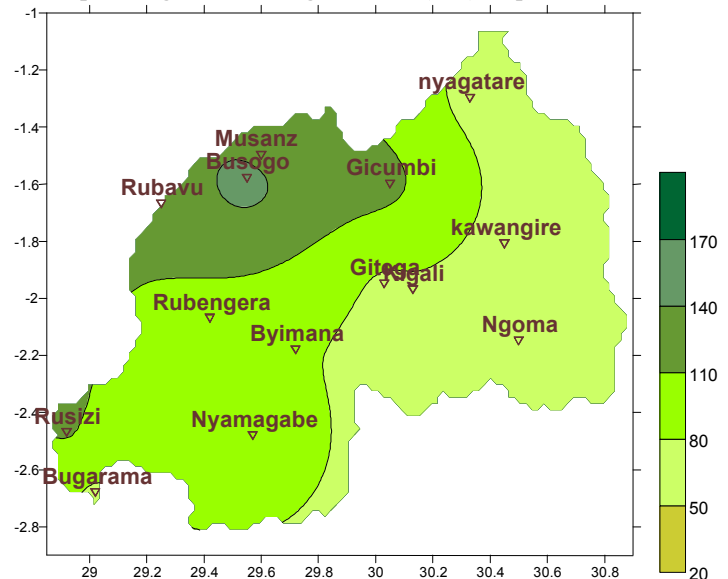
Map2: Long Term Average Rainfall (mm): Oct.



Map3: Total Rainfall (mm): Sept.2016



Map4: Long Term Average Rainfall (mm): Sept.



II. Detailed observed rainfall during the of October 2016

Though there was a dry spell in the 2nd through the 3rd dekad of October 2016 (refer to the “*Bulletin N°29/2016*”); the overall rainfall (cumulative rainfall amount) observed in the month of October was within the range at different stations (see **Map1&2**):

a) Eastern Province

Despite what was observed in September; where almost all stations showed the below normal (see **Map3&4**); in October; except the south-eastern portion of this Province (at Ngoma station with 27.2mm of rainfall amount; see **Table1**); other stations showed the value lying within the climatic range

b) Northern Province

All the stations; in this Province; are approximately at normal mean range; i.e. this Province lies close to the climatic range for the past two months (see **Table1** and **Map1, 2, 3&4**). There seems to be an increase in terms of rainfall amount in October for the whole Province (see **Table1** and **Map1&2**)

c) Southern Province

All the stations are approximately at normal mean range; i.e. this Province’s rainfall accumulation lies close to the climatic range for the past two months (see **Table1** and **Map1, 2, 3&4**). The rains of October shifted westwards (enhanced over the west and suppressed over the east see **Table1** and **Map1&2**)

d) Western Province

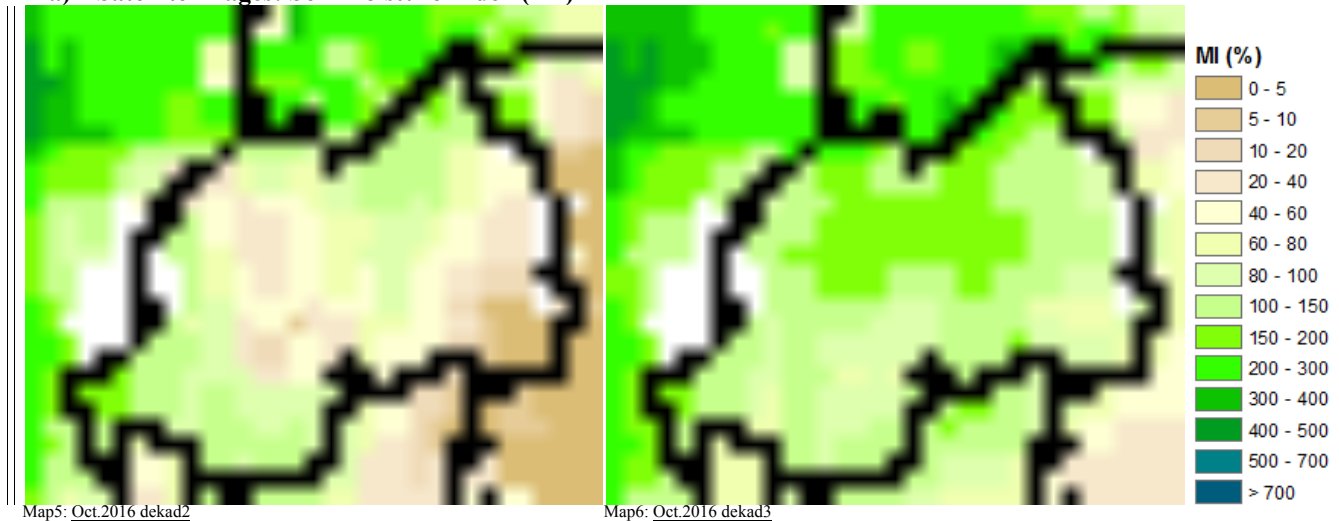
Again here; all the stations are approximately at normal mean range; i.e. this Province's rainfall accumulation lies close to the climatic range for the past two months (see **Table1** and **Map1, 2, 3&4**). The rains of October shifted northwards (enhanced over the north and suppressed over the south)

e) Kigali Region

The central part with 2 representatives stations Kigali and Gitega; received overall rainfall for both months which lies also within the climatic range (see **Table1** and **Map1, 2, 3&4**).

III. Agricultural impact.

a) Satellite images: Soil Moisture Index (MI)



In the mid-October 2016, there was a dry spell that tend to decrease the moisture content and vegetation cover over the whole Rwanda; but since towards the last days of the 3rd dekad we had enhanced rainfall country wide (especially the stretched northern part of the country); the moisture is again getting favorable to different varieties of crops (see **Map5&6**) Irrigation should support this season which presents to us as alternatively wet and dry days and a below normal behavior comparing to climatology; in many parts of the country.

The month of November 2016; we expect continuation of rains across the country and rain cessation at the end of the month (at some stations). Farmers are again advised to keep on harvesting rainwater to be used for irrigation.

b) Rainfall forecast for the month of November 2016

The month of November 2016; at some stations; we expect continuation of rains across the country and rain cessation at the end of the month for some stations within the country:

Kigali City; is expecting to experience alternatively wet and dry days which will be at below normal range comparing to climatology and rain cessation at the end of this November.

Eastern Region; is expecting to experience less activities except the north where expected enhanced rainfall amount and rain cessation towards the end of this November.

Western Region; is expecting moderate rains at normal range throughout November ranging from normal to above.

Northern region; is expecting moderate rains at normal range throughout November at normal range.

Southern Region; is expecting to experience less rainfall events throughout November except the southwestern part which may receive a higher amount of rainfall but at a normal range comparing to climatology.

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)