



Highlights:

- **The cumulative rainfall** for dekad1_October_2018 the rainfall amount reduced at almost all stations except what was observed at Rubengera station;
- During dekad1_October_2018; the soil moisture index shows a considerably increase country wide result of the recent rains as opposed to the dekad that preceded this (dekad3_September_2018);
- The weather pattern during dekad2_October_2018 is expected to mainly wet in the first dates and less wet towards its end

I. Introduction

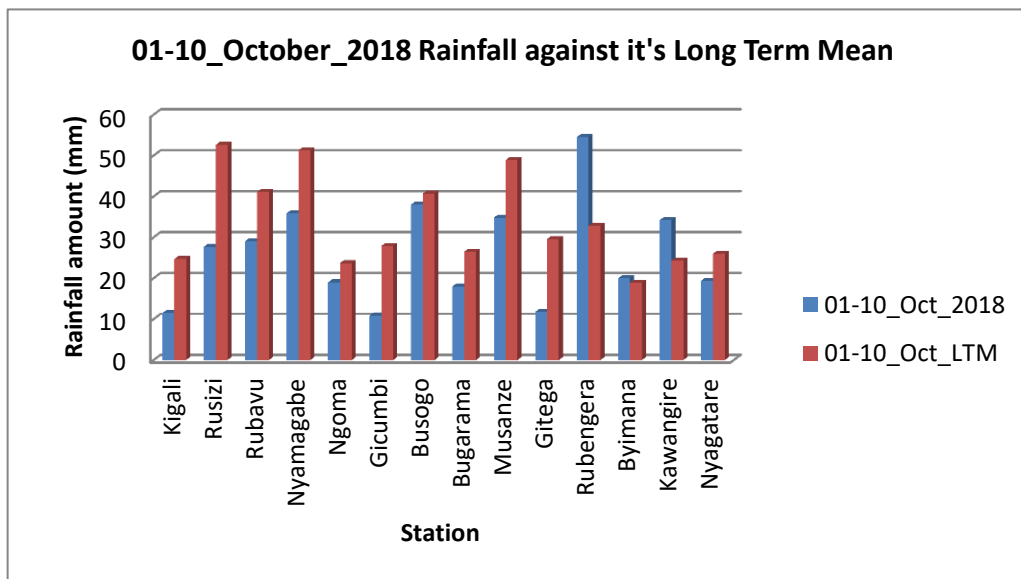
The rainfall during dekad1_October_2018 the rainfall amount reduced at almost all stations except what was observed at Rubengera station in the Western Province

a) The table and histogram below indicates the rainfall recorded during dekad1_October_2018 and its LTM:

Cumulative rainfall (in mm) recorded at different stations

Station	01-10_Oct_2018	01-10_Oct_LTM
Kigali	11.5	24.7
Rusizi (Kamembe)	27.7	52.6
Rubavu (Gisenyi)	29.1	41.1
Nyamagabe (Gikongoro)	35.9	51.3
Ngoma (Kibungo)	19.0	23.7
Gicumbi (Byumba)	10.9	27.9
Busogo	38.0	40.7
Bugarama	18.0	26.5
Musanze (Ruhengeri)	34.8	48.9
Gitega	11.8	29.6
Rubengera	54.5	32.8
Byimana	20.0	18.9
Kawangire	34.2	24.3
Nyagatare	19.4	26.0

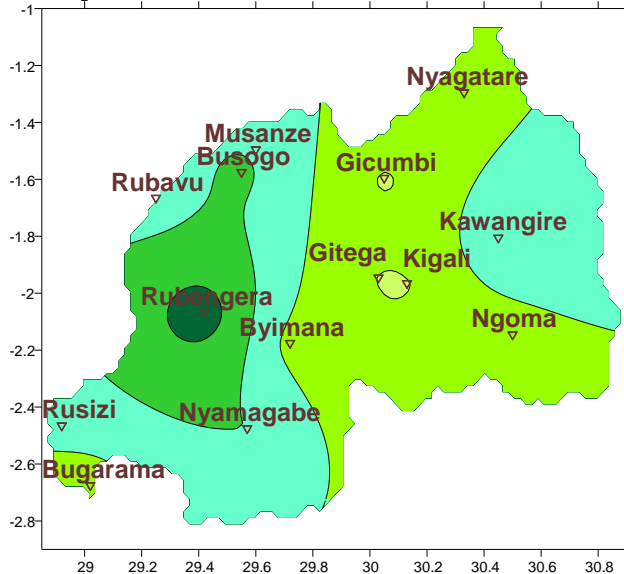
Table1



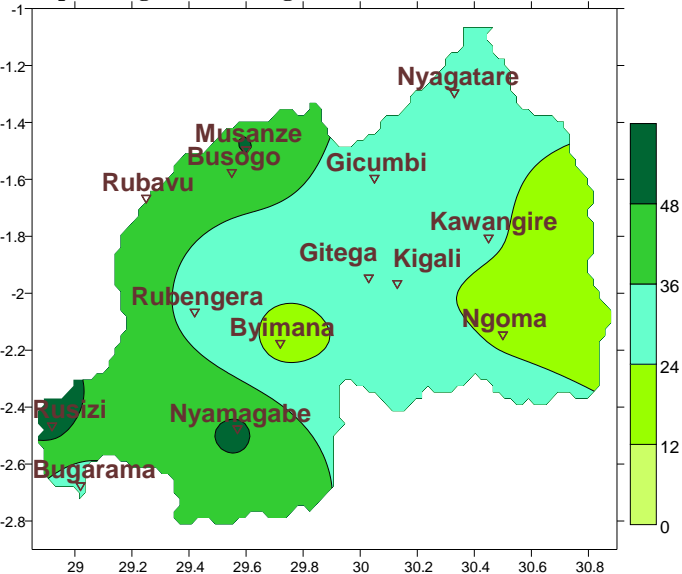
Plot1

b) **Rainfall analysis:** The maps “Map 1 and 2” below show the cumulative rainfall recorded during dekad1_October_2018 and the cumulative rainfall for the same period
 The maps “Map 3 and 4” show the cumulative rainfall recorded during dekad3_September_2018 the cumulative rainfall for the same period

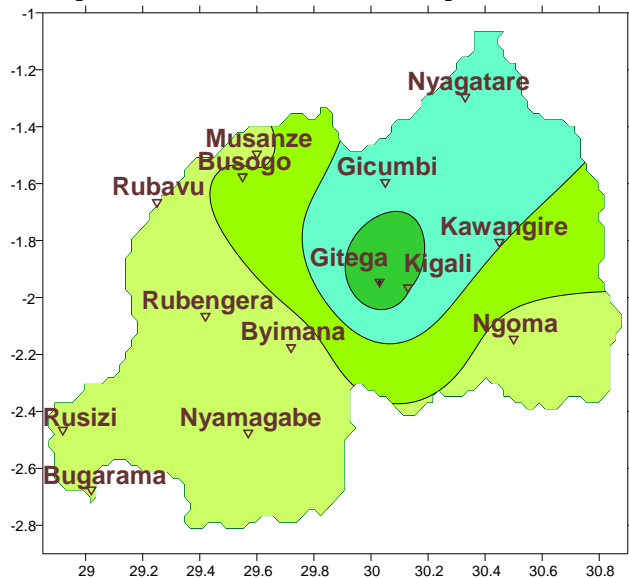
Map1: Total Rainfall (mm): dekad1_Oct_2018



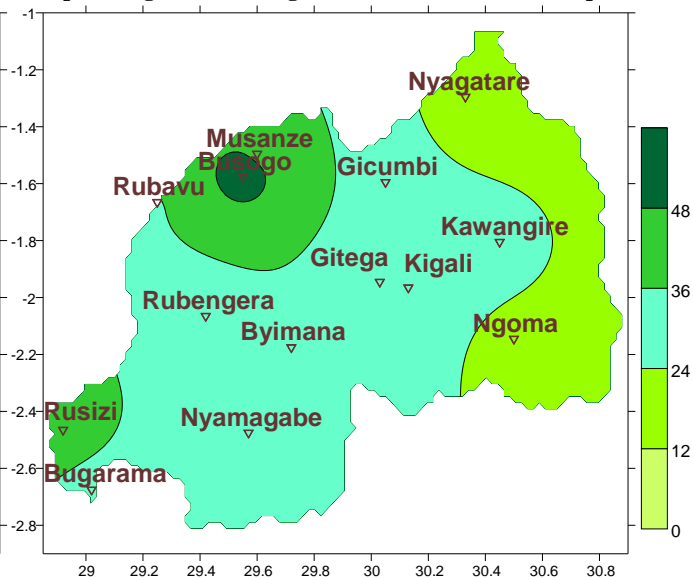
Map2: Long Term Average Rainfall (mm): dekad1_Oct_LTM



Map1: Total Rainfall (mm): dekad3_Sep_2018



Map2: Long Term Average Rainfall (mm): dekad3_Sep_LTM

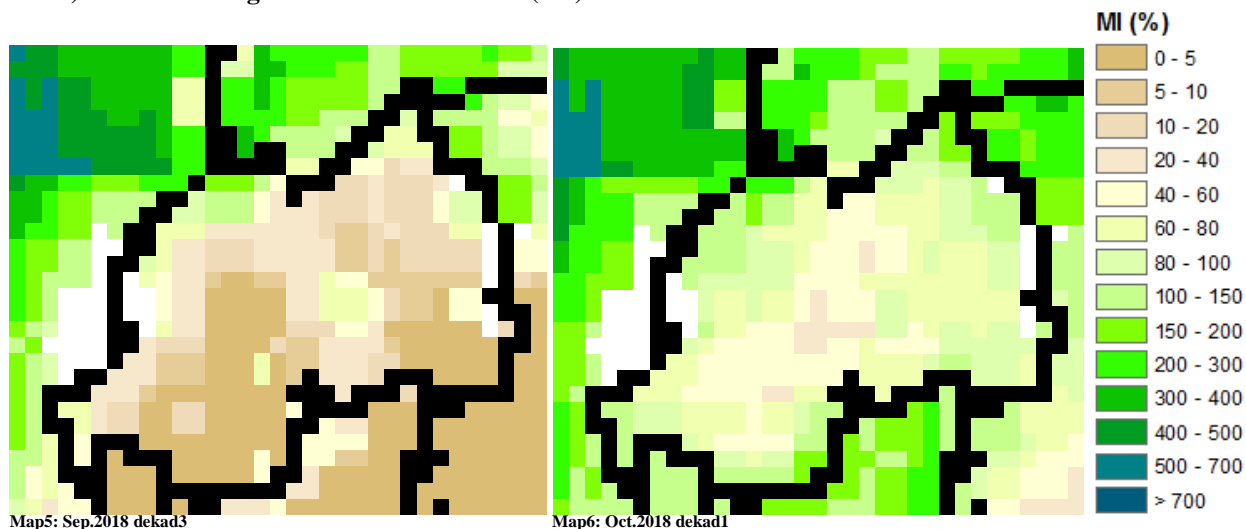


II. Detailed observed rainfall during the dekad1_October_2018

Cumulative rainfall dekad1_October_2018 the rainfall amount reduced at almost all stations except what was observed at Rubengera station in the Western Province in comparison with the Long Term Mean (LTM) of rainfall amount (see **Map1&2** and **Table1**). During the third of September_2018; the cumulative rainfall amount shows high values over the central towards the northeast and less elsewhere within the country (see **Map3&4**)

III. Agricultural impact.

a) Satellite images: Soil Moisture Index (MI)



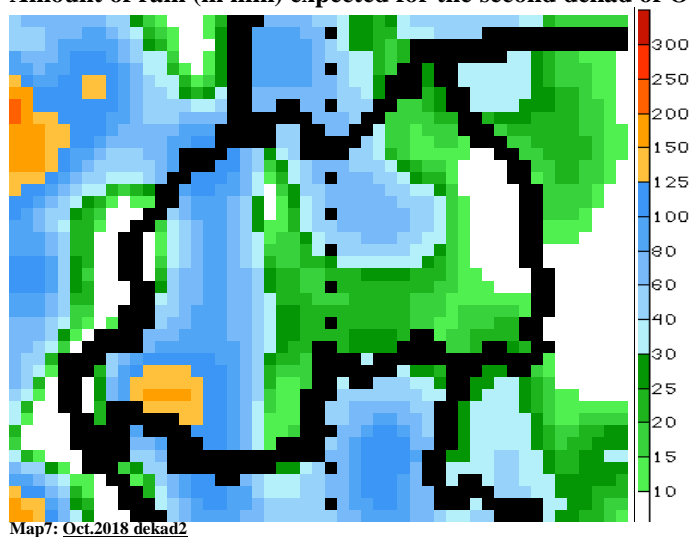
From the start of dekad3_September to end of dekad1_October_2018; the satellite derived moisture index shows an increase in soil moisture widely as a result of the recent rains received over most parts of the country (see **Map 5&6**)

b) Rainfall forecast for dekad2 October_2018

The distribution of rains during dekad2_October_2018 is expected to be mainly wet in the first dates and less wet towards its end:

- Kigali City: moderate rains (30-80 mm of rainfall; i.e.; within the normal range)
- Eastern Province: less likelihood of rain (0-40 mm of rainfall; i.e.; normal to below the normal range)
- Southern Province: little to moderate rains (10-80 mm of rainfall; i.e.; within normal range to below)
- Northern Province: moderate rains (30-80 mm rainfall; i.e.; within the normal range)
- Western Province: between 30-150 mm rainfall; i.e.; within the above range over the south and normal elsewhere

Amount of rain (in mm) expected for the second dekad of October_2018



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)