



Agrometeorological Bulletin N° 29, Dekad2, October (11– 20) 2020 Issued on 22nd October 2020

Summary

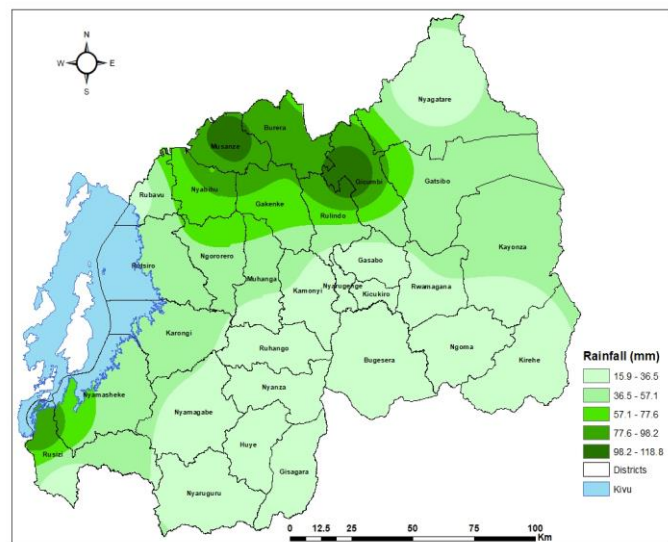
The second Dekad (11- 20) of October 2020; indicated that the Inter Tropical Convergence Zone (ITCZ) is still well located over the region just above Rwanda and rainfall activities are well established across the country even though the rainfall is very scattered. Normal to above normal rainfall was recorded in the Northern province, the Eastern province recorded normal rainfall while Western, Southern Province and Kigali City recorded below normal rainfall except Kamembe Airport that recorded above normal. The highest rainfall amount was recorded in Northern Province at Gicumbi station with 118.8mm in 8 rain-days, followed by Musanze Airport station with 115.9mm in 8 rain-days, Kamembe Airport station with 90.9mm in 8 rain-days and Busogo station with 77.3mm in 8 rain-days. The lowest rainfall less than 20mm was recorded at Nyamagabe and Kigali International Airport. The temperature was within the range of Long Term Mean. The maximum temperature ranged between 21.4°C at Gicumbi and 30.7°C at Bugarama stations. Minimum temperature ranged between 11.8°C at Busogo and 19.1°C at Bugarama stations respectively. The soil moisture contents and soil temperatures were favourable for seed germination across the country.

1.0 Rainfall Pattern

This section provides the overview of observed rainfall amount, rainy-days and available soil moisture for the second dekad of October 2020.

1.1 Rainfall Amount

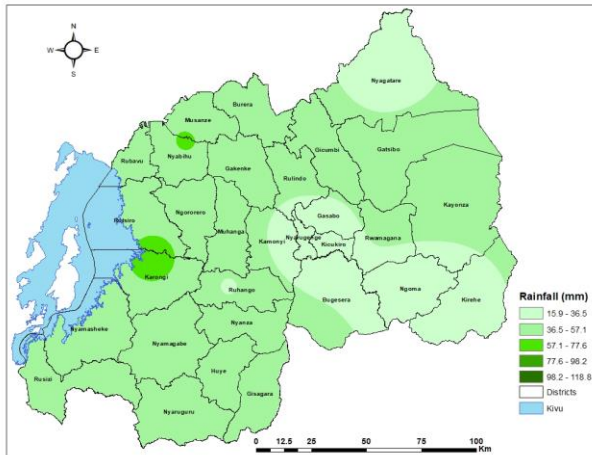
The actual total rainfall amount recorded in the second dekad of October, 2020 is presented in Map 1. On daily basis it was observed that this dekad received light to moderate rainfall in most parts of the country. The Northern Province received much rainfall compared to the other parts of the country. The accumulated rainfall in ten days ranged between 15.9mm at Kigali International Airport station to 118.8mm at Gicumbi station respectively.



Map 1: Rainfall amount during 2nd Dekad of October 2020

1.2 Rainfall climatology for the 2nd dekad of October

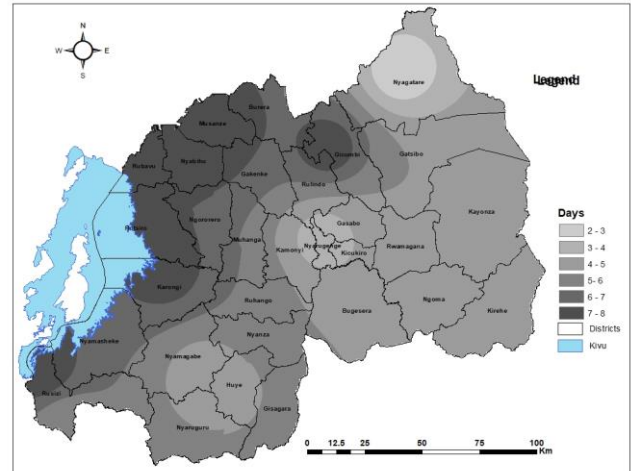
The rainfall climatology for the 2nd dekad of October is shown in map 2, and it indicates that normally the rainfall ranges from 28.5 to 63mm across the country. Comparing to the 2nd dekad of October 2020 and the Long Term Mean (LTM) for the same period; it was observed that in most parts of the country, the second dekad recorded Normal to below normal rainfall except in Northern province and in western parts of Rusizi District.



Map 2: Rainfall amount during 2nd Dekad of October (LTM)

1.3. Number of Rain Days

The Map 3 shows the distribution of number of raindays across the country. A rainy day is defined as a day with at least 0.85mm of rainfall. As it is shown in map 3, most parts of the country had 4 to 8 rainy days except at Gitega and Nyagatare stations that had 3 and 2 rain-days respectively. The northern and western region of the country received many rain-days but generally rain days were favourable across the country.



Map 3: Rainy days for dekad2 of October 2020

1.4 Soil moisture index

This section shows the available soil moisture across the country. The soil moisture showed an normal soil moisture over most parts of the country except in Northern Province where soil moisture content was above the normal due to wet weather conditions and cloud cover experienced during the second dekad of October 2020. The soil moisture will continue to increase during the third dekad of October 2020 due to the expected wet weather conditions.

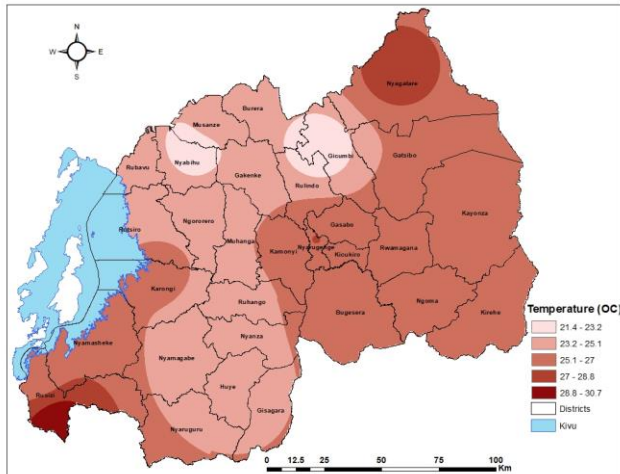
2.0 Temperature observation

The average maximum and Minimum temperature across the country during the second dekad of October 2020 is highlighted in the section below.

2.1 Mean Maximum Temperature

Map 4 shows the actual mean maximum temperature distribution across the country which indicates that the South Western parts, Kigali City, northern and southern parts of the Eastern Province were warmer than the Northern, Southern and the Western Provinces. However, in most parts of the country the mean maximum temperature ranged between 21.4⁰C and 27.0⁰C with exceptional case of slightly

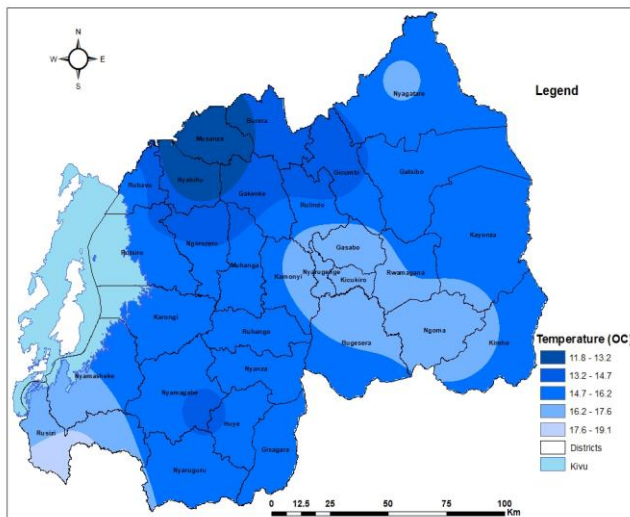
high temperature of 28.1⁰C and 30.7⁰C recorded at Nyagatare and Bugarama stations.



Map 4: Mean Maximum Temperature for dekad2 October 2020

2.2 Minimum Temperature

The average minimum temperature across the country is shown in Map 5. The Northern parts experienced colder temperature than the other parts of the country. The minimum temperature ranged between 11.8⁰C at Busogo and 19.1⁰C at Bugarama stations respectively.



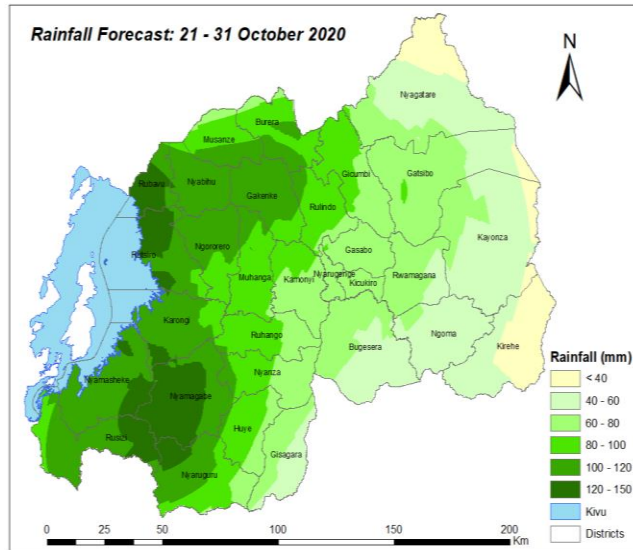
Map 5: Mean Minimum Temperature for dekad2 October 2020

3.0 Weather Outlook and Agricultural advisories for the third dekad (21-31) October, 2020.

3.1 Weather Outlook for the third dekad of October 2020.

Rainfall expected between 21st and 31st October 2020 will range between 30 and 150 mm across the country. The Eastern Province is expected to have rainfall ranging between 40 and 80 mm but some parts of eastern Kirehe, north eastern Nyagatare, eastern part of Kayonza and Gatsibo districts (cattle corridor) are likely to receive less than 40 mm. Kigali City is expected to have rainfall ranging between 60 and 80 mm whereas Southern Province is expected to experience rainfall ranging between 60 and 120 mm. Nyungwe forest and surrounding parts of Nyamagabe and Nyaruguru districts will receive rainfall ranging from 120 to 150 mm. Western Province is expected to have rainfall ranging between 80 and 150 mm while Northern Province is expected to receive rainfall ranging between 60 and 120 mm.

The expected rain will result from mesoscale and local scale systems which are associated with organized Inter Tropical Convergence Zone over the region. Rainy days will be varying between 3 and 8 days increasing from East to West. The rainfall will be widely distributed within ten days duration. The expected rain will be above the Long Term Average of third dekad of October.



Map 6: Rainfall Forecast for the third dekad of October 2020

3.2 Agricultural Activity/Advisories

The stakeholders in Agriculture sector are advised to fast track seed and fertilizers delivery to the farmers, timely planting in most parts of the country and agricultural practices that increases soil water holding capacity in the driest areas of the country are encouraged. The germination of the seeds are undergoing and this may require a close monitoring. In the next ten days, much care on germinated seeds will be the main activity in the country. Farmers are advised to work closely with Agriculture Extension Officers for more information which will support their agriculture activities. For more meteorological information you can visit Meteo Rwanda's website: www.meteorwanda.gov.rw or call the toll free number 6080.