



Agrometeorological Bulletin N° 27, Dekad3, September (21– 30) 2020 Issued on 02nd October 2020

Summary

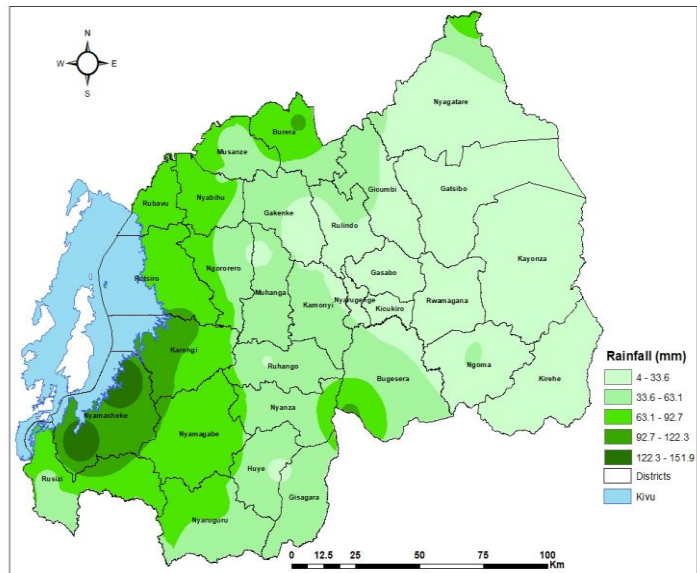
The third Dekad (21- 30) of September 2020; indicated that the Inter Tropical Convergence Zone (ITCZ) is located over our region and rainfall activities are well established across the country. Normal to above normal rainfall was recorded in most parts of the country. The Southern and the Weastern Provinces were relatively wet compared to other parts of the country. The highest rainfall amount was recorded in Western Province at Ntendezi station with 151.9mm in 7 raindays, followed by Karama-Kilimbi station with 138.7mm in 7 raindays and Rubengera station with 99.4mm in 7 raindays. The lowest rainfall less than 10mm was recorded at Mwiri and Nyagahanga stations which recorded 9 and 4mm respectively. The temperature was within the range of Long Term Mean. The maximum temperature ranged between 21.8°C at Gicumbi and Busogo stations and 31.7°C at Bugarama station. Minimum temperature ranged between 11.5°C at Busogo and 19.5°C at Bugarama station. The soil moisture contents was slightly increased and favorable for seed planting and other agriculture activities.

1.0 Rainfall Pattern

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

1.1 Rainfall Amount

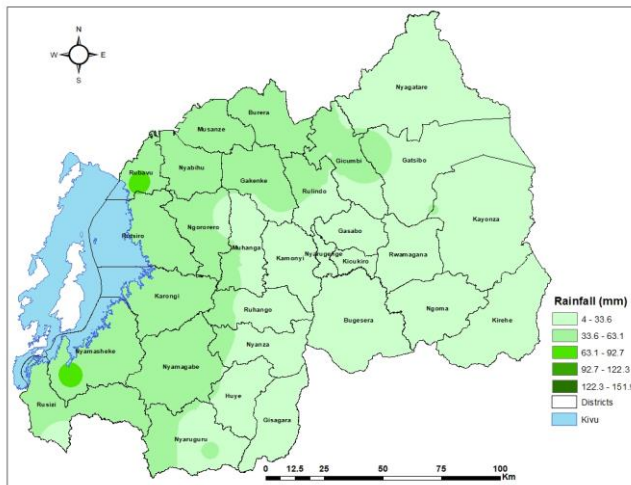
The actual total rainfall amount recorded in the third dekad of September, 2020 is presented in Map 1. On daily basis it was observed that this dekad received moderate rainfall in most parts of the country. The Western, Southern and the Nothern provinces received much rainfall compared to the other parts of the country. The accumulated rainfall in ten days ranged between 4 to 151.9mm at Nyagahanga and Ntendezi station respectively.



Map 1: Rainfall amount during 3rd Dekad of September 2020

1.2 Rainfall climatology for the 3rd dekad of September

The rainfall climatology for the 3rd dekad of September is shown in map 2, and it indicates that rainfall ranged from 12.3 to 75mm across the country. Comparing to the 3rd dekad of September 2020 and the Long Term Mean (LTM) for the same period; it was observed that in all parts of the country, the third dekad was wet, since it's recorded normal to above normal rainfall in most parts of the country.

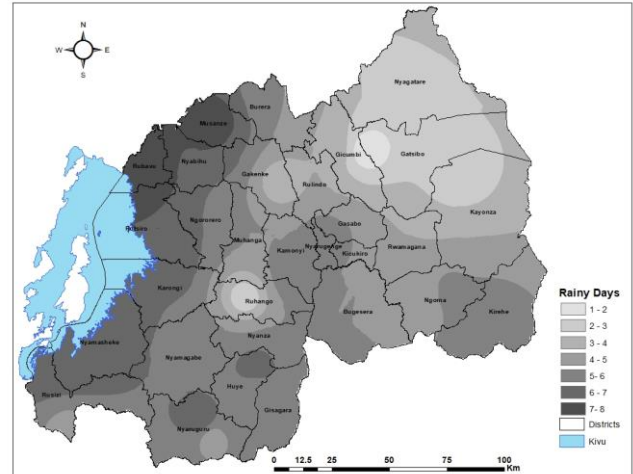


Map 2: Rainfall amount during 3rd Dekad of September (LTM)

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. of

As it is shown in map 3, most parts of the country had 5 to 8 rainy days except few parts in the Eastern region of the country that had 1 to 4 rain days within the dekad.



Map 3: Rainy days for dekad3 of September 2020

1.4 Soil moisture index

This section shows the available soil moisture across the country. The soil moisture showed an increase over most parts of the country due to wet weather conditions experienced during the third dekad of September 2020. The soil moisture will continue to increase during the first dekad of October 2020 due to the expected wet weather conditions.

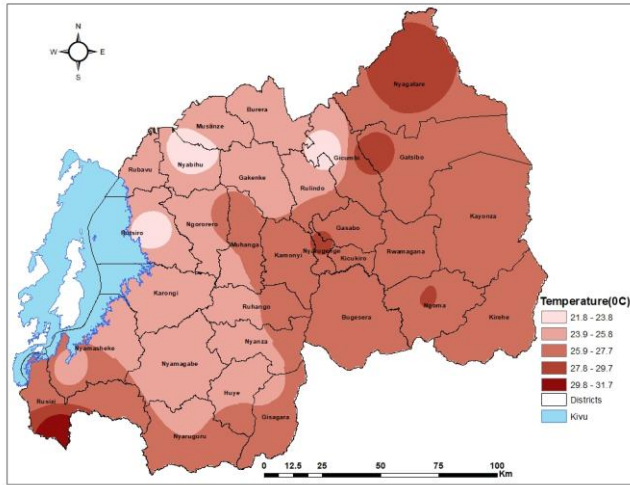
2.0 Temperature observation

The average maximum and Minimum temperature across the country during the third dekad of September 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 and the Southern and the Western Provinces. However, in most parts of the country the mean maximum temperature ranged between 21.8⁰C and 28.9⁰C with exceptional case of slightly high temperature of 29.1⁰C and 31.7⁰C

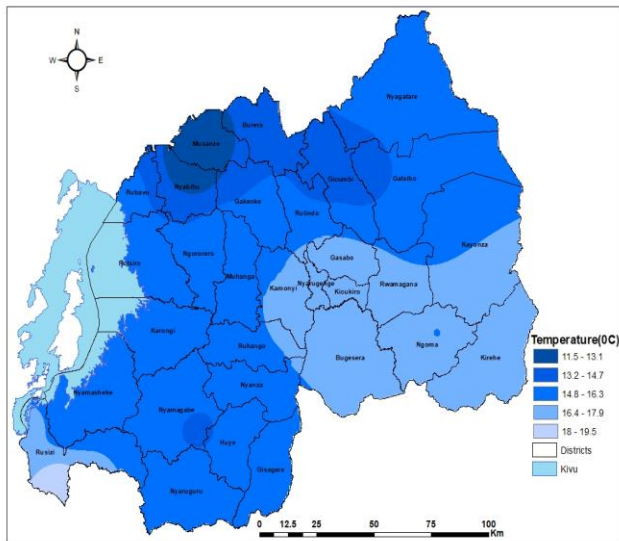
recorded at Nyagahanga and Bugarama stations.



Map 4: Mean Maximum Temperature for dekad3 September 2020

2.2 Minimum Temperature

The average minimum temperature across the country is shown in Map 5. The Northern part experienced colder temperature than the other parts of the country. The minimum temperature ranged between 11.5^oC at Busogo and 19.5^oC at Bugarama stations respectively.



Map 5: Mean Minimum Temperature for dekad3 of September 2020

3.0 Weather Outlook and Agricultural advisories for the first dekad (01-10) October, 2020.

3.1 Weather Outlook for the first dekad of October 2020.

The map 6 below show the Rainfall forecast expected between 1st and 10th October 2020. The expected rainfall is ranging between 20 and 80mm across the country. The Eastern province and Kigali City are expected to receive rainfall ranging between 10 and 30mm but small part located in east of Nyagatare and Gatsibo district will get up to 40mm. The Southern Province is expected to have rainfall ranging between 20 and 50mm with enhanced rainfall up to 80mm in Nyamagabe and Nyaruguru. The Western and the Northern Provinces are expected to get rainfall ranging between 40 and 80mm.

The expected rain will be associated with the location of the Inter-Tropical Convergence Zone (ITCZ) over region that will enhance mesoscale systems such as Lake Victoria and Congo Air Mass. The rainfall is expected on 1st and 2nd dates and from 8th to the end of Dekad but light rain is possible on other dates in Northern and Western Provinces, Nyamagabe and Nyaruguru Districts. In the Western and Northern Province including Nyamagabe and Nyaruguru Districts will get increased rainy days compared to other parts. Rainfall expected will be associated with thunder and moderate to strong winds. The rain will be in the range of Long Term Mean of October dekad1.

