



Agrometeorological Bulletin N° 34, Dekad1, December (01– 10) 2020 Issued on 13th December 2020

Summary

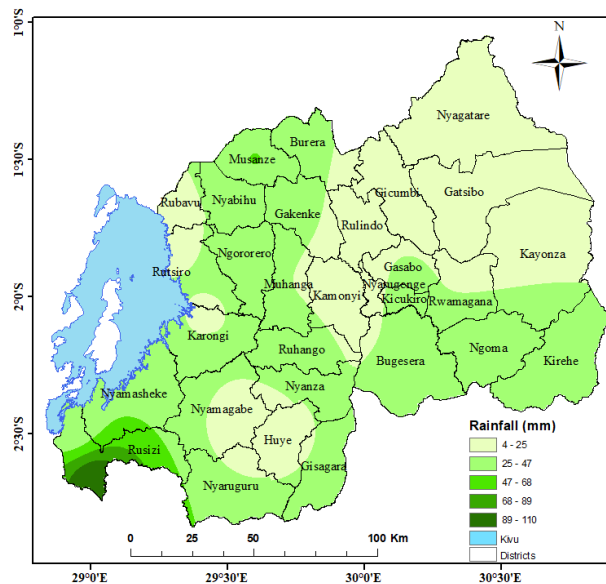
The first Dekad (01-10) of December 2020; indicated that the Inter Tropical Convergence Zone (ITCZ) is still well located over the region even though the first dekad was dry in most parts of the country. Normal to below normal rainfall was recorded in most parts although few parts of the country recorded abovenormal rainfall. The highest rainfall amount was recorded in Western Province in Rusizi district at Bugarama station with 111mm in 4 rain-days, followed by Musanze Airport station in Nothern Province with 47.7mm in 4 rain-days and Ngoma-Kazo station in Eastern Province with 46.8mm in 2 rain-days. The lowest rainfall less than 10mm was recorded in Eastern Province at Kawangire and Nyagatare stations recorded 6.5 and 4mm respectively. The temperature was within the range of Long Term Mean. The maximum temperature ranged between 21.0°C at Gicumbi and 29.9°C at Bugarama stations. Minimum temperature ranged between 10.4°C at Busogo and 18.7°C at Bugarama stations respectively.

1.0 Rainfall Pattern

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

1.1 Rainfall Amount

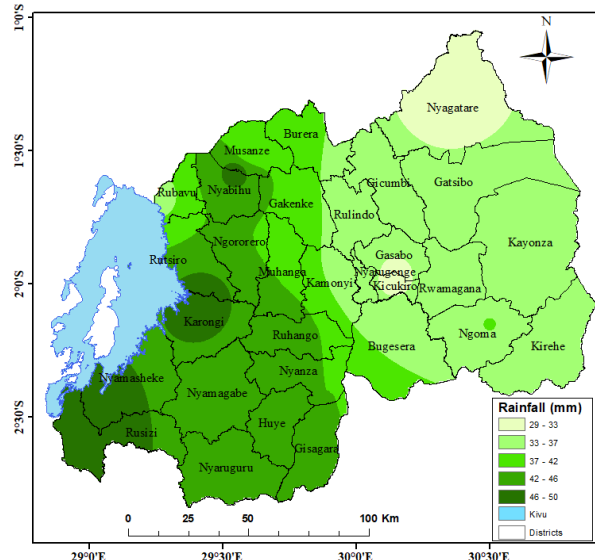
The actual total rainfall amount recorded in the first dekad of December, 2020 is presented in Map 1. On daily basis it was observed that fist dekad received light to moderate rainfall in most parts of the country. Western Province and South eastern of the Eastern Province were comparatively wet. Stations across the country recorded below rainfall which was good for rainfed agriculture.



Map 1: Rainfall amount during 1st Dekad of December 2020

1.2 Rainfall climatology for the 1st dekad of December

The rainfall climatology for the 1st dekad of December is shown in map 2, and it indicates that normally the rainfall ranges from 28.8 to 50.5mm across the country depending on the region. Comparing to the current dekad of December 2020 and the Long Term Mean (LTM) for the same period; it was observed that the current dekad was dry in most parts of the country.

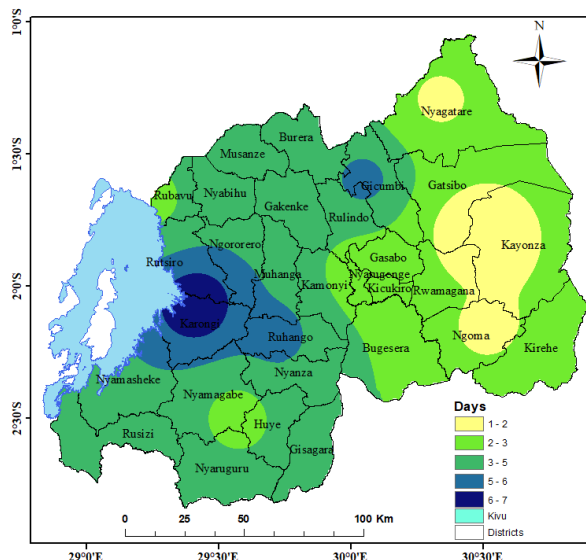


Map 2: Rainfall amount during 1st Dekad of December (LTM)

1.3. Number of Rain Days

The Map 3 shows the distribution of number of rain days 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 3 to 7 rainy days except Ngoma-Kazo, Kawangire and Nyagatare had one to two rainy days. During the forecasting period (second dekad of December 2020) rainy days will be varying between two and four.



Map 3: Rainy days for dekad1 of December 2020

1.4 Soil moisture index

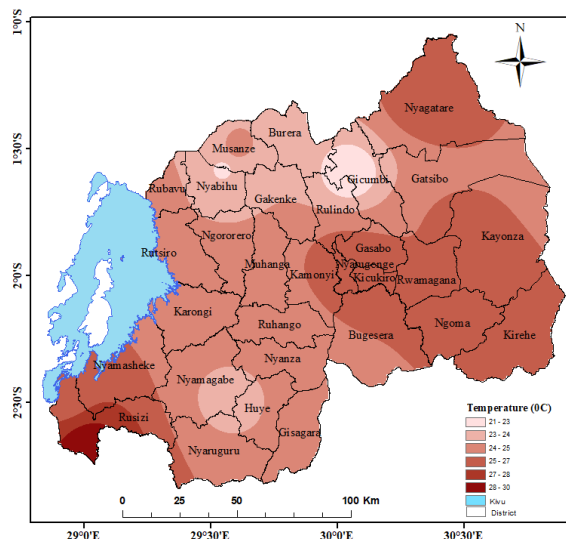
This section shows the available soil moisture across the country. The soil moisture was in normal conditions in over most parts of the country. The soil moisture will decrease in the second dekad of December 2020 due to the expected decrease of rainfall amount expected. .

2.0 Temperature observation

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

2.1 Mean Maximum Temperature

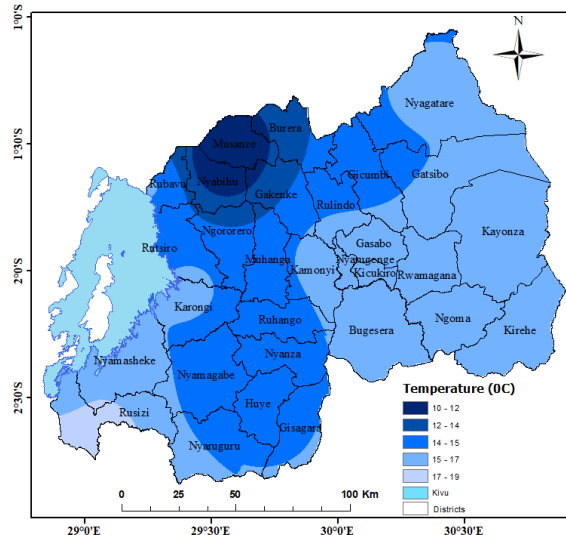
Map 4 shows the actual mean maximum temperature distribution across the country which indicates that the south western parts, Kigali City, northern and southern parts of the Eastern Province were warmer than the Northern, Southern and the Western Provinces. The mean maximum temperature ranged between 21.0⁰C and 26.9⁰C with exceptional case of slightly high temperature of 29.9⁰C recorded at Bugarama station.



Map 4: Mean Maximum Temperature for dekad1 December 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 10.4⁰C at Musanze Airport station and 18.7⁰C at Bugarama station respectively.



Map 5: Mean Minimum Temperature for dekad1 December 2020

3.0 Weather Outlook and Agricultural advisories for the second dekad (11-20) December, 2020.

3.1 Weather Outlook for the second dekad of December 2020.

The rainfall reduction is expected between 11th and 20th December 2020 across the country and it is significant in Northern and Eastern Provinces. The expected rainfall between 11th and 20th December 2020 will be ranging between 20 and 80mm across the country which is in the range of Long Term Average for December dekad two. The distribution of the rainfall across the country is highlighted below:

Eastern Province: Rainfall ranging between 20 and 50mm is expected. The Eastern parts of Kayonza, Nyagatare and Gatsibo along the border are expected to record less rainfall ranging between 20 and 30mm. The Central and southern parts of Kirehe District, Eastern Ngoma, wester part of Gatsibo and Rwamagana are expected to receive rainfall ranging between 40 and 50 mm while remaining parts are expected to receive rainfall between 30 and 40 mm.

Kigali City: Rainfall ranging between 30 and 50mm is expected. Kicukiro district and southern part of Nyarugenge district are expected to receive rainfall ranging between 30 and 40 mm while Gasabo district and remaining part of Nyarugenge are expected to receive rainfall between 40 and 50mm.

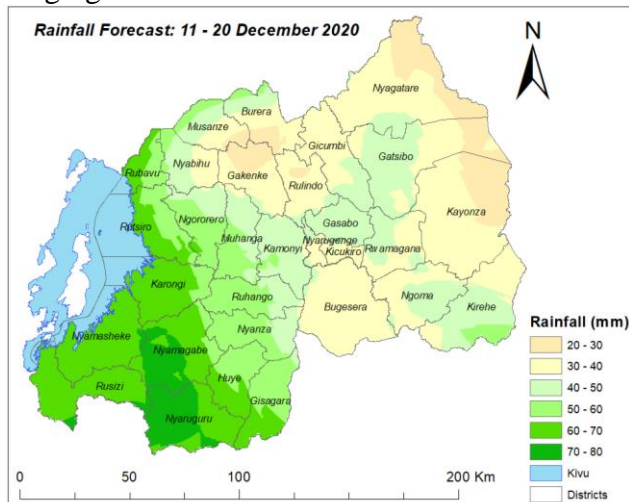
Southern Province: The Province is expected to receive rainfall ranging between 40 and 80mm. Kamonyi district together with eastern parts of Nyanza, Ruhango, Muhanga and northern part of Muhanga are expected to receive rainfall ranging between 40 and 50 mm. Western part of Nyaruguru and Nyamagabe bordering Nyungwe National Park are expected to receive rainfall ranging between 70 and 80 mm. Remaining parts of the Province are expected to receive rainfall ranging between 50 and 70mm.

Western Province: Nyabihu and north east of Ngororero are expected to receive rainfall ranging between 30 and 50 mm while the east of Rubavu, Rutsiro, Karongi and the rest of Ngororero are expected to receive rainfall ranging between 50 and 60 mm. Rusizi, Nyamasheke and remaining parts of Karongi, Rutsiro and Rubavu are expected to receive rainfall ranging between 60 and 70mm.

Northern Provinces: The expected rainfall will be ranging between 20 and 60mm. Rainfall ranging between 40 and 60mm is expected in volcanic area of Musanze, Burera and southern part of Gicumbi. Remaining parts of the Province are expected to receive rainfall ranging between 20 and 40mm.

3.2 Agricultural Activity/Advisories

The flowering of seasonal crops is in the undergoing stage in most parts of the country; weeding and application of pesticides where necessary will be the main activity for coming ten days. 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.



Map 6: Rainfall Forecast for the second dekad of December 2020