



Agrometeorological Bulletin N° 02, Dekad2, January (11– 20) 2021
Issued on 22nd January 2021

Summary

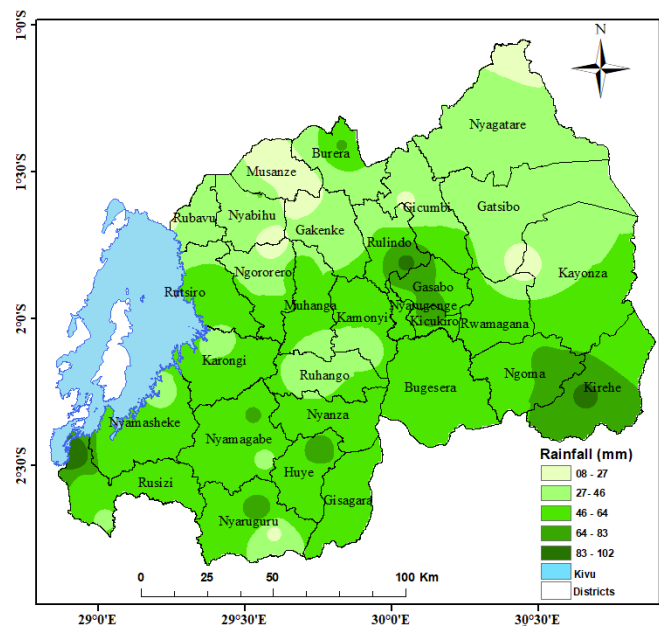
The second Dekad of January 2021 from 11th to 20th, was influenced by the Madden-Julian Oscillation which has been active over the region represented by cloudy conditions that were moving eastward along the tropical Indian and Pacific Oceans, thus increased the moisture air over the region where Rwanda is located. Normal to above normal rainfall was recorded in most parts of the country. The highest rainfall amount was recorded in Rusizi district at Kamembe Airport station with 102.2mm in 5 rain-days, followed by Rutongo station in Rulindo district with 88.1mm in 6 rain-days and Kirehe with 87.2mm in 6 rain-days. The lowest rainfall less than 10mm was recorded at Kagitumba and Cyabingo stations. The temperature was within the range of Long Term Mean.

1.0 Rainfall Pattern

This section provides the overview of observed rainfall amount, rainfall anomalies, comparison of observed rainfall with LTM, rainy-days and available soil moisture.

1.1 Rainfall Amount

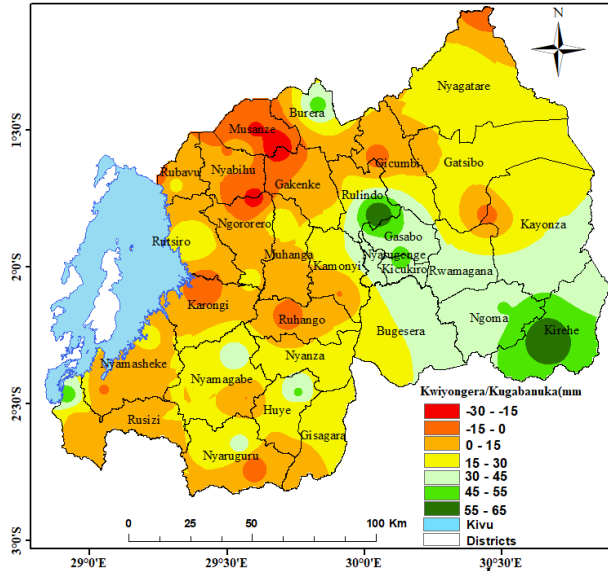
The actual total rainfall amount recorded in the second dekad of January, 2021 is presented in Map 1, it was observed that this dekad was wet and most stations across the country recorded above normal rainfall. The highest rainfall amount was recorded in Rusizi district at Kamembe Airport station with 102.2mm in 5 rain-days, followed by Rutongo station with 88.1mm in 6 rain-days and Kirehe station with 87.2mm in 6 rain-days.



Map 1: Rainfall amount during 2nd Dekad of January 2021

1.2 Rainfall Anomaly (Deficity and Surplus)

The rainfall anomaly as shown in map 2, shows that most stations across the country experienced excess rainfall except some parts of Northern and Western Provinces.



Map 2: Rainfall anomaly during 2nd Dekad of January 2021

1.3. Comprison of Observed rainfall with Long Term Mean condition for the dekad.

The comparison of recorded rainfall amount and long term mean records for the 2nd dekad across the country are shown in figure 1 and 2. Normal to above normal conditions were experienced across the country in this dekad.

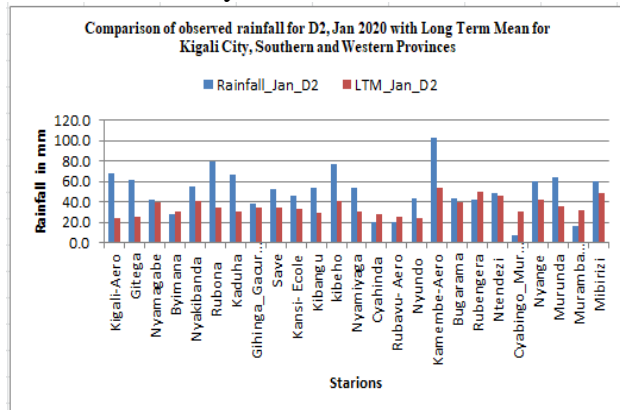


Figure1: Comparision of observed with long term mean rainfall for the dekad for Kigali City, Southern and Western Provinces.

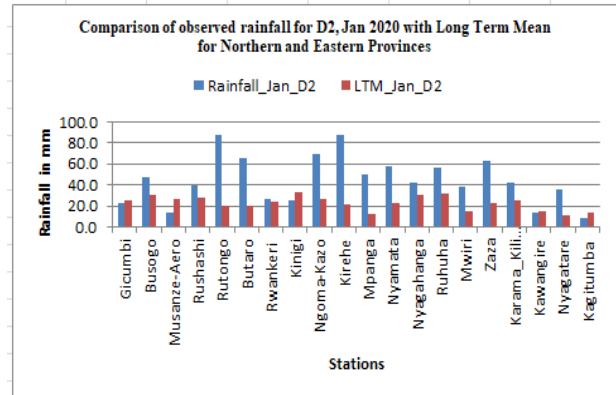
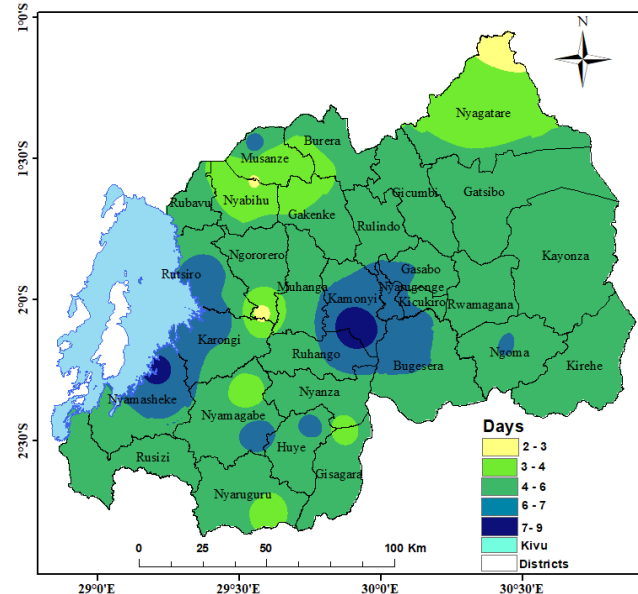


Figure 2: Comparison of Observed with long term mean rainfall for Nothern and Estern Provinces.

1.4 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. The distribution shows that most parts of the country had 3 to 9 of rainy days except Kagitumba station that had two rainydays. The distribution was good but may led to loss of crop yield due to postharvest hunding activities which are affected. Three to five rainy days are expected in the third dekad.



Map 3: Rainy days for dekad2 of January 2021

1.5 Soil moisture condition

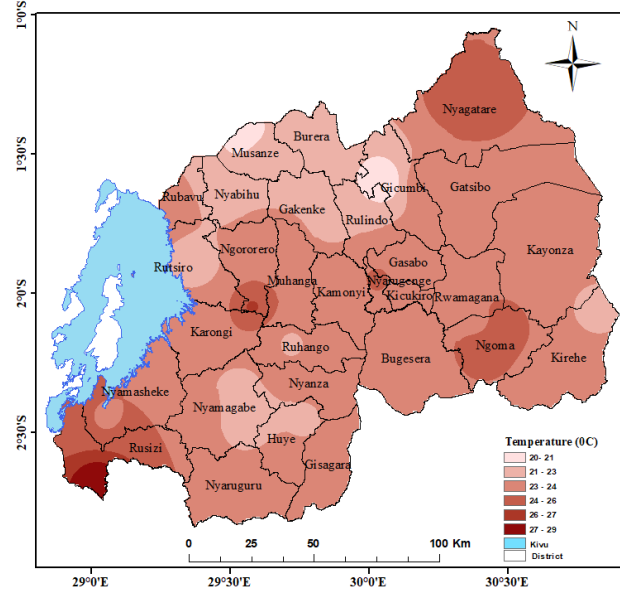
This section shows the available soil moisture content across the country. The soil moisture was increased over most parts of the country due to wet weather conditions experienced. The soil moisture content will retain in the third dekad of January 2021 due to wet weather condition expected.

2.0 Temperature observation

The average maximum and Minimum temperature across the country during the second dekad of January 2021 is highlighted in the section below.

2.1 Mean Maximum Temperature

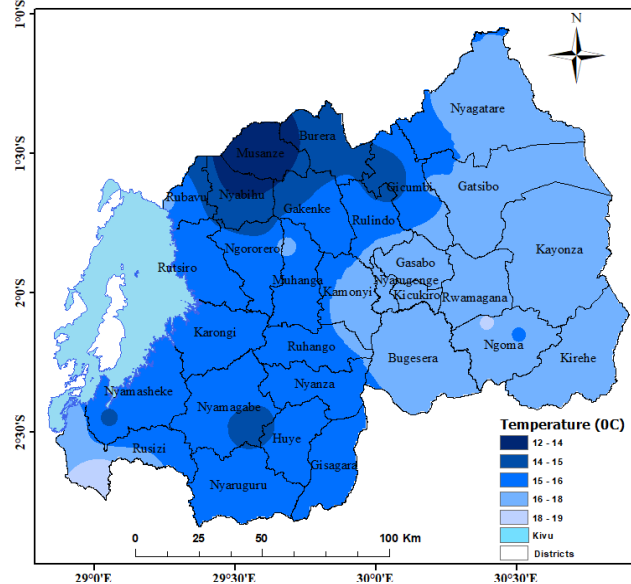
Map 4 shows the actual mean maximum temperature distribution across the country which indicates that the southwestern parts, Kigali City, northern and southern parts of the Eastern Province were warmer than the rest of the country. The mean maximum temperature ranged between 19.5°C and 26.1°C at Gicumbi and Nyange station respectively with exceptional case of slightly high temperature of 29.1°C recorded at Bugarama station.



Map 4: Mean Maximum Temperature for dekad 2 January 2021

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 12.2°C and 18.9°C at Busogo and Bugarama stations respectively.



Map 5: Mean Minimum Temperature for dekad 2 January 2021

3.0 Weather Outlook and Agricultural advisories for the third dekad (21-31) January, 2021.

3.1 Weather Outlook for the third dekad of January 2021.

Between 21st and 31st January 2021, light to moderate rainfall range between 15 and 150 mm across the country is expected. Slightly enhanced rain is expected between 23rd and 25th in south western parts of the country. Significant reduction of rainfall is expected toward the end of the dekad (from 26th to 31st). The expected rainfall will be significantly above the range of Long Term Mean in south western part of the country (Nyamagabe, Nyaruguru, Nyamasheke and Rusizi districts) and slightly above average in remaining parts. The distribution of the rainfall across the country is highlighted below:

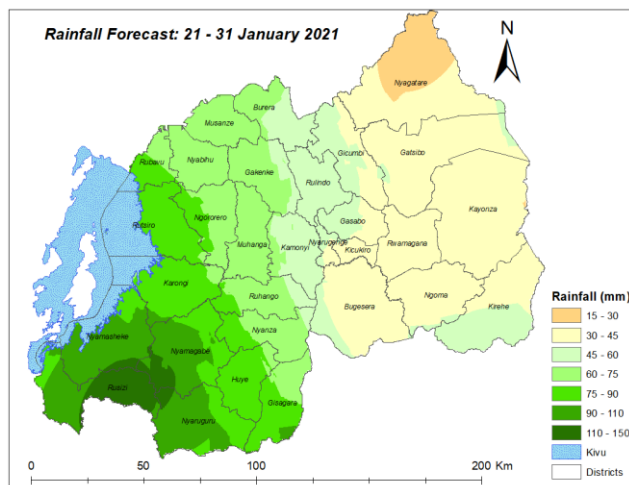
Eastern Province: Rainfall ranging between 15 and 60 mm is expected. Northern part of Nyagatare district is expected to experience less rainfall ranging between 15 and 30mm while southern part of Kirehe is expected to receive rainfall ranging between 45 and 60mm. Remaining parts of the province are expected to receive 30 to 45 mm of rainfall.

Kigali City: Rainfall ranging between 30 and 60 mm is expected. Kicukiro district, eastern parts of Nyarugenge and Gasabo districts are expected to receive rainfall ranging between 30 and 45 mm while western parts of Gasabo and Nyarugenge districts are expected to receive rainfall ranging between 45 and 60 mm.

Southern Province: is expected to receive rainfall ranging between 45 and 150 mm. Kamonyi district and eastern parts of Nyanza and Ruhango are expected to receive rainfall ranging between 45 and 60 mm. Muhanga, Huye, Gisagara and remaining parts of Ruhango and Nyanza districts are expected to receive rainfall ranging between 60 and 90mm. Most parts of Nyamagabe and Nyaruguru districts are expected to receive increased rainfall ranging between 75 and 110 mm except western parts of mentioned districts located in Nyungwe National Park which are expected to receive up to 150 mm of rainfall.

Western Province: Nyabihu district, Eastern part of Ngororero and northern parts of Rubavu are expected to receive rainfall ranging between 60 and 75 mm. Rutsiro, Karongi and remaining parts of Rubavu and Ngororero districts are expected to receive rainfall ranging between 75 and 90 mm. Rusizi and Nyamasheke districts are expected to receive rainfall ranging between 90 and 110 mm but small part of the mentioned districts located near Nyungwe National Park are expected to receive up to 150 mm of rainfall.

Northern Province: Rainfall ranging between 30 and 75 mm is expected. Rainfall ranging between 60 and 75 mm is expected in Musanze and in western parts of Burera and Gakenke. Rainfall ranging between 45 and 60 mm is expected in Rulindo, in eastern parts of Burera and Gakenke and western part of Gicumbi district while eastern parts of Gicumbi is expected to receive rainfall ranging between 30 and 45 mm.



Map 6: Rainfall Forecast for the third decade of January 2021

3.2 Agricultural Activity/Advisories

Generally, in most parts of the country, seasonal crops are on harvesting period. The focus in these coming days should be on postharvest activities and these areas with high rainfall amount should closely monitored to avoid possible flooding. Farmers are advised to work closely with Agriculture Extension Officers for detailed 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.