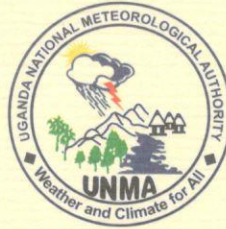


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Ref: FCT/102/02

6th December, 2021

THE CLIMATE OUTLOOK FOR DECEMBER, 2021 AND REVIEW OF THE RAINFALL PERFORMANCE FOR NOVEMBER, 2021

1.0 Summary

- ❖ The rainfall outlook for December, 2021 indicates that dry conditions are likely to prevail over most parts of Northern and Eastern regions. This is an indication of cessation/withdrawal of September to December (SOND), 2021 rainfall over those areas of the country. The rest of the country especially parts of western and central region, and those adjacent to Lake Victoria basin extending to Mt Elgon subregion are likely to experience wet conditions during the early period of the month. A gradual decline in rainfall amount will be experienced towards the end of the month.
- ❖ The month of November was generally characterised by normal (average) rainfall conditions over most parts of the country.

2.0 Rainfall Outlook for December, 2021

Generally, the month of December is associated with the cessation of second rainfall season (September to December) across most parts of the country. The rainfall outlook for the month of December, 2021 indicates that most parts of the country are expected to experience dry conditions while parts of Western, central and fringes of Lake Victoria extending to Mt Elgon regions are expected to continue receiving occasional isolated showers. Enhanced rainfall is however, expected in south and mid-western regions of Uganda. Refer to Fig-1 below:



Rainfall Forecast (mm): December 2021

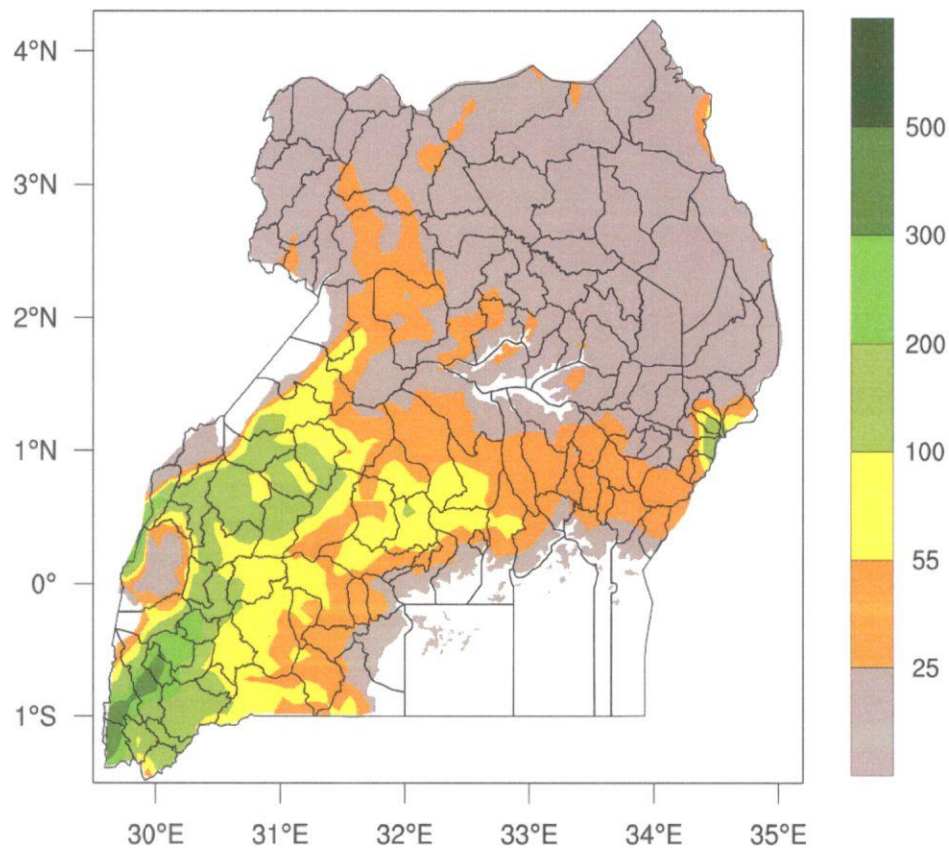
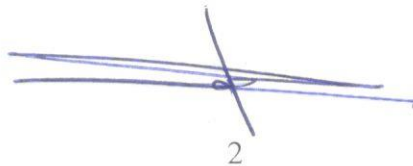


Figure 1: Rainfall Forecast Outlook for the month of December 2021

3.0 Temperature Forecast for December 2021

3.1 Maximum Temperature:

The maximum temperatures are expected to increase in most parts of the country with the northern region expected to experience high temperatures compared with southern parts of the country. From the maximum temperature forecast, the temperatures of 26 to 30 degrees centigrade ($^{\circ}\text{C}$) are expected to prevail in most parts of northern Uganda with Acholi and West Nile sub regions experiencing the highest temperatures from 28 to 30 degrees centigrade ($^{\circ}\text{C}$). The rest of the country is expected to experience relatively lower temperatures ranging from 20 to 24 degrees Centigrade ($^{\circ}\text{C}$). The lowest maximum temperatures are expected in highland areas of Rwenzori, Elgon and Kigezi among others. Refer to figure 2:



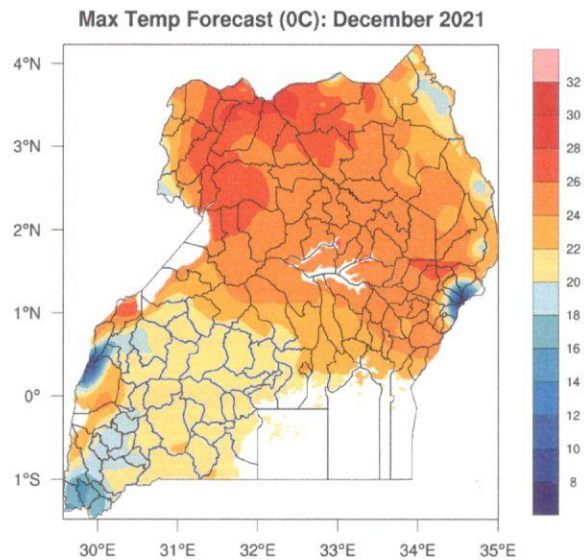


Figure 2: Expected spatial maximum temperature distribution across the country during December, 2021

a) Minimum Temperature:

During the month of December, the lowest minimum temperatures of about 14 to 20 degrees centigrade are expected to prevail over the western, and south-western extending to central parts of the country and the rest of the country is likely to experience the lowest temperatures in the range of about 20 to 26 °C especially in parts of Eastern and Northern regions. Refer to figure 3.

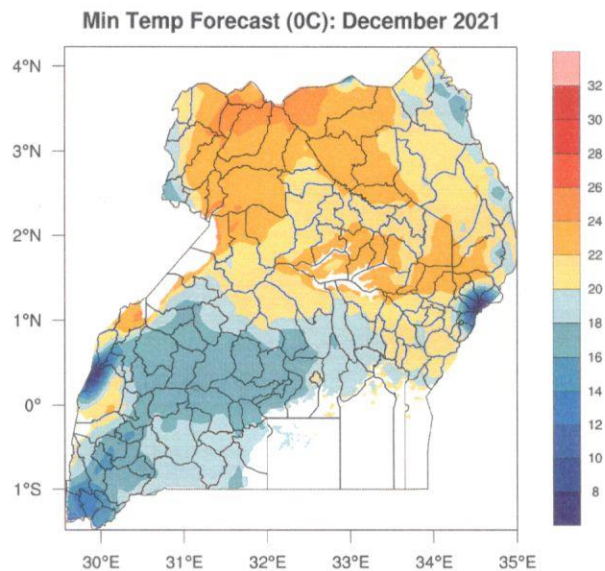


Figure 3: Expected spatial minimum temperature distribution across the country during December 2021.

b) Mean Temperature:

The Northern region is expected to have mean temperature of 22°C and above over most parts while some parts of the Western, South Western, Central regions plus the highland areas of Rwenzori and Elgon are expected to experience lower mean daily temperatures in the range of 14°C to 22°C in some of those areas as shown in figure 4:

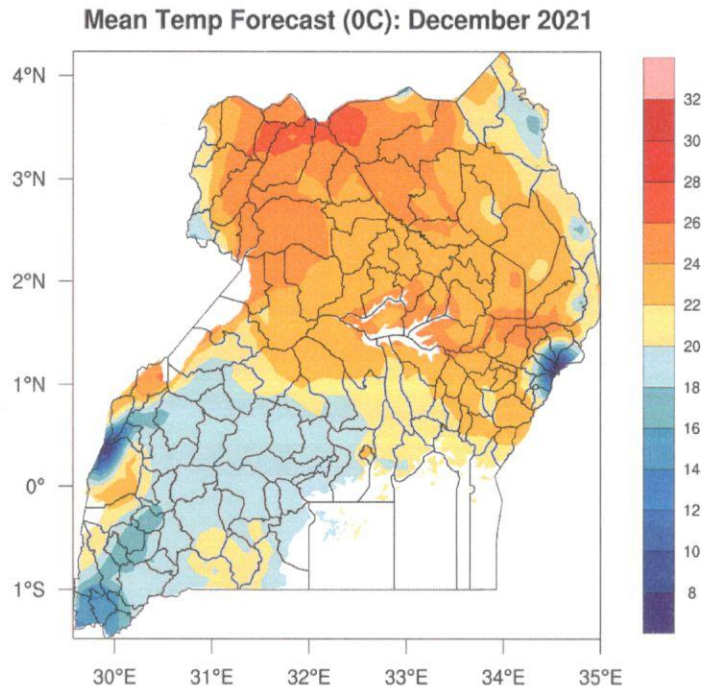


Figure 4: Expected spatial mean temperature distribution across the country during the month of December, 2021.

4.0 Potential impacts expected during December, 2021

The predicted weather conditions over most parts of the country are expected to result into the following impacts;

- In Agricultural sector, farmers are expected to continue weeding in areas where rainfall is expected especially in western parts of the country
- Communities in areas predicted to experience suppressed rainfall should continue harvesting their crops.
- In pastoral areas especially in cattle corridor, the reduced rainfall will lead to further deterioration in foliage and pasture for livestock.
- Most parts of the country are expected to experience an increase in the temperature both day and night.

5.0 Review of rainfall performance in November, 2021

The rainfall performance in the month of November 2021 indicates that wetter activities were experienced in most districts of the country, with poor distribution over the North Eastern sector. Further analysis (Graph 1) shows that most weather stations across the country recorded above average rainfall from their Long-Term Mean (LTM).

From the data records, Busano washing bay station in Sironko district recorded the highest rainfall amount of 213.4mm. This was followed by Bulindi farm station in Hoima district, Kamenyamigo in Masaka district, and Kawanda in Wakiso District with amounts of 181.6mm, 178.4mm and 177.3mm respectively. The lowest amount of 20.5mm was recorded at Kotido station.

In terms of distribution, Kawanda Station in Wakiso District recorded the highest number of rainy days with 19 days in the month. This was followed by Budduda station, Kyenjojo Station and Kyembogo Station in Kabalore District all with 18 days of rainfall activity each. The lowest number of rainy days were observed in Kotido, Kiige, Serere and Arua stations with 2, 3, 6 and 7 days respectively.

The highest rainfall intensity in the country (highest rainfall amount recorded in a day) was observed at Arua Weather Station with amount of 76.2mm on 12th November, 2021 and Kampala Station with 65.7mm on 4th November 2021. For more details, refer to fig 5 and 6 below.

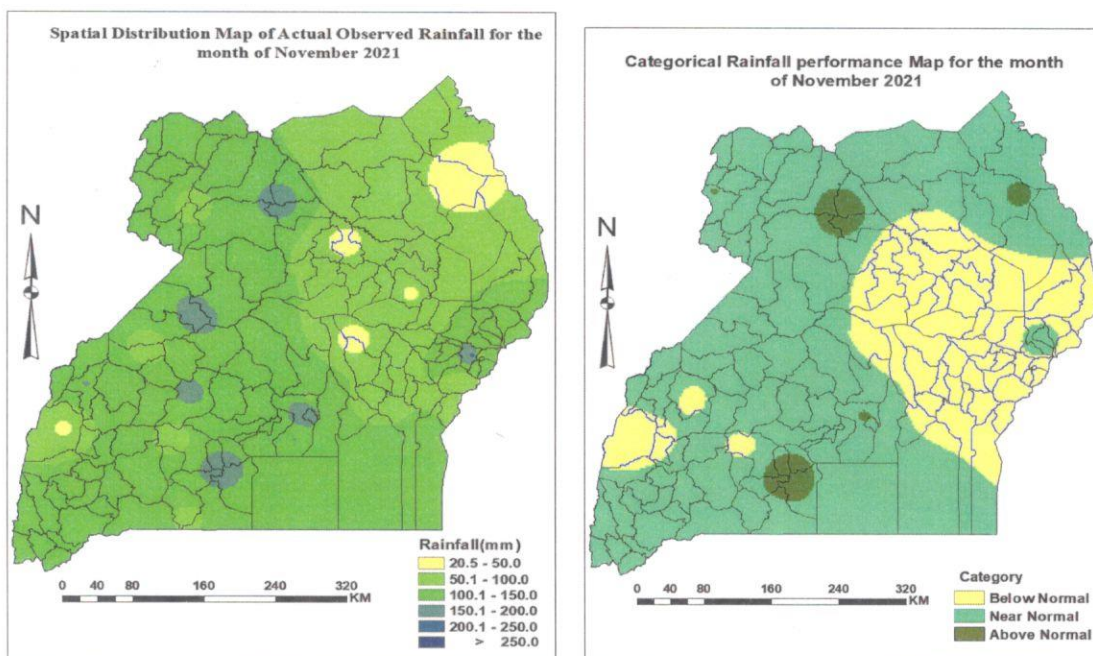
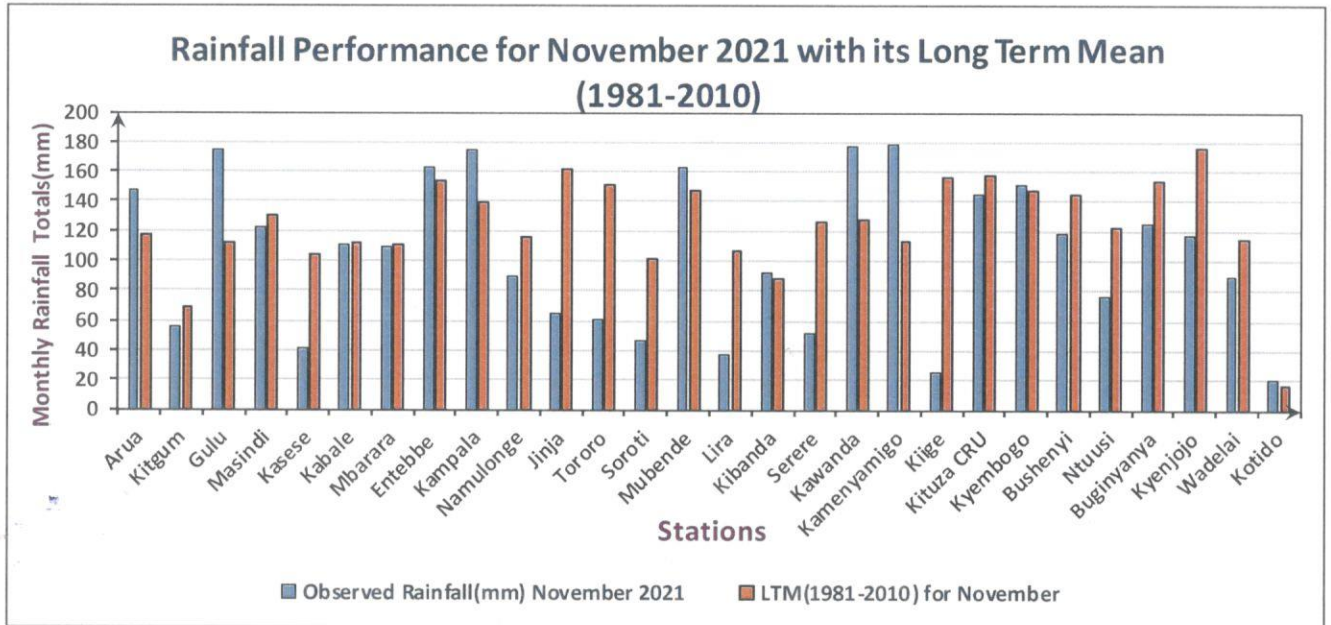


Fig 5 and 6 Shows Rainfall performance amounts and rainfall performance anomaly for November 2021.

Graph 1: Comparative graph of observed rainfall for November 2021 with the Long term mean (1981-2010)



The month of November, 2021 shows that most stations across the country recorded more rainfall as compared to their long term mean, With Kamenyamigo, Kawanda, Gulu and Kampala receiving more rainfall than their respective Long-Term Mean (LTM). In general, most stations recorded average rainfall.

6.0 Experienced Impacts during November 2021

The rainfall performance during this impacted positively on various sectors of the economy

- In Agricultural sector, most farming communities benefited from the prolonged rains which favoured crop growth and as a result of prolonged rains in November, farmers across the country continued with the weeding of their crops
- In the pastoral areas the prolonged rains resulted into good pasture growth for the livestock;
- Water levels in most rivers and lakes increased significantly due to enhanced rainfall experienced in most parts of the country and this resulted into widespread flooding in many parts of the country
- Floods were recorded in most parts of the country including floods in Kampala on 5th November, 2021 which disrupted transport systems.

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Ag. EXECUTIVE DIRECTOR

