

REPUBLIC OF RWANDA



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Performance of rainfall in January and February 2019 with January and February long term mean and the weather outlook for March 2019

The performance of January rainfall which received in comparison to the long term mean show that most of the stations around the country recorded suppressed rainfall over most parts of the country during the month of January 2019; the south western part of the country recorded slight above normal rainfall compare to its long term mean. February 2019 indicated that most of the stations recorded depressed rainfall, whereby Bugarama station in the South western part of the country recorded above normal rainfall with 225.8mm compared to the long term mean of 81.7mm.

The rainfall distribution, both in time and space, was generally poor over most parts of the country especially during the month of February 2019.

The outlook for March 2019 indicates that most parts of the country are likely to experience near normal with a tendency to above-normal especially over the western, North and south western parts of the country.

The results comparison of long term mean against current observed rainfall for January and February 2019 are presented in the Figure1&2 below. The results indicates that the stations located in South Western (Kamembe, Bugarama and Nyamagabe stations) have received high rainfall with the highest rainfall amount observed over Bugarama station in Rusizi district, while the rest of the stations across the country received less rainfall compared to the long term mean.

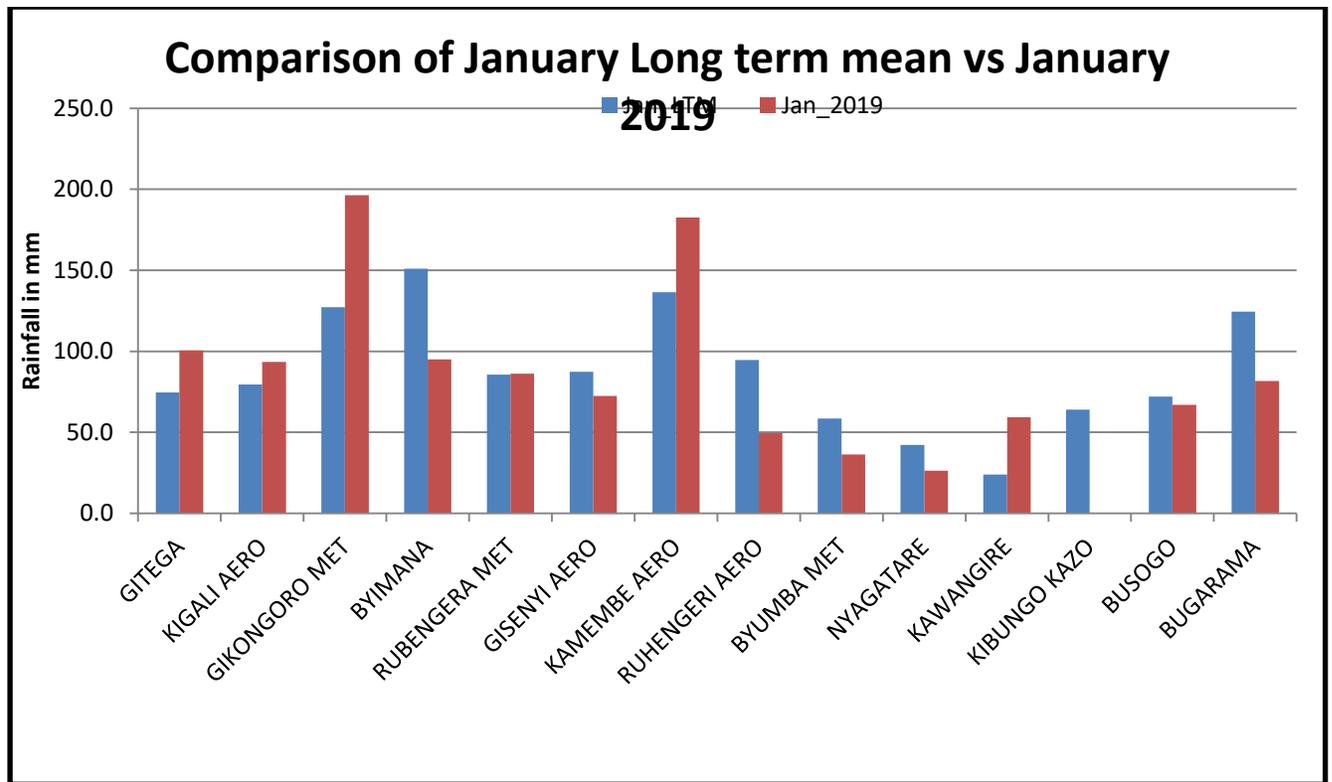


Figure 1: Total rainfall (mm) during January-2019 and January long term mean (mm)

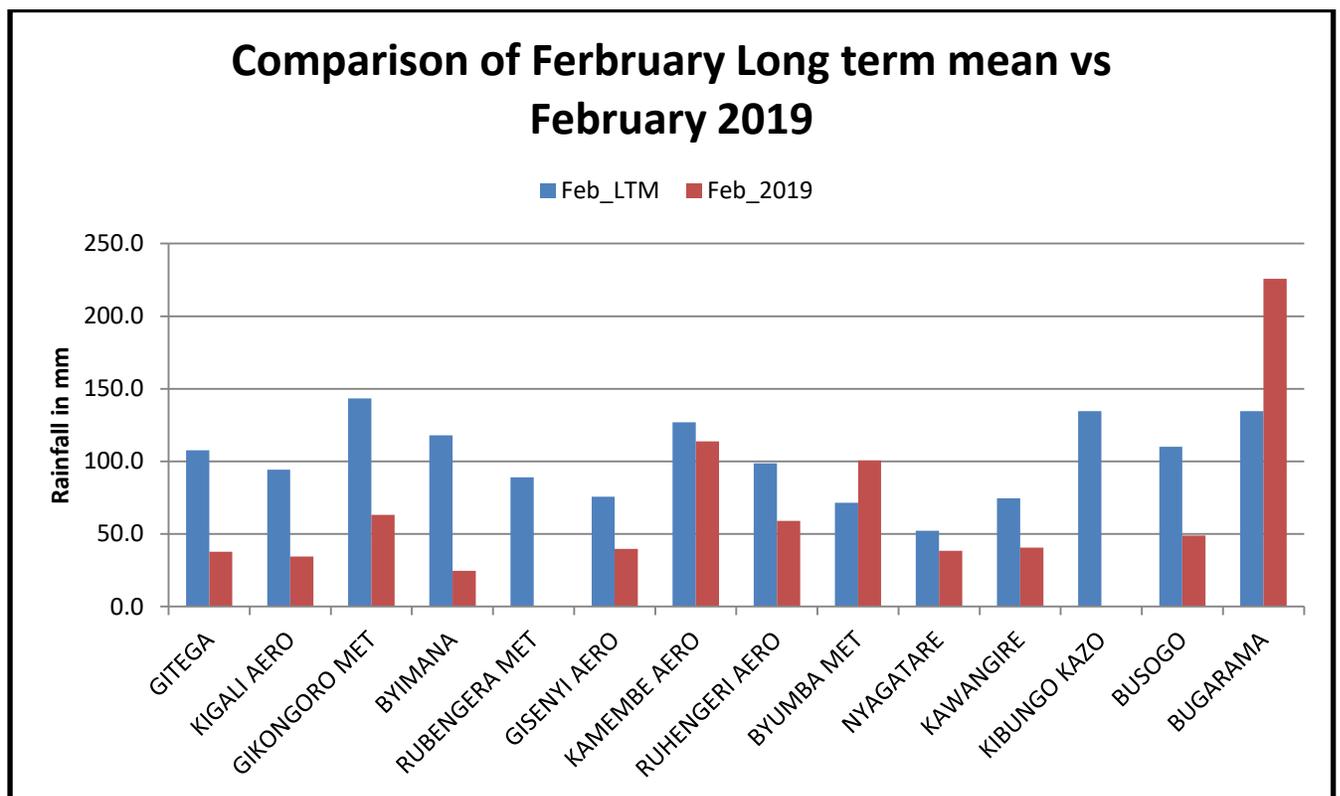


Figure 2: Total rainfall (mm) during February-2019 and February long term mean (mm)

In Fig 3, several stations in the country during February 2019 recorded negative anomalies compare to their February Long-Term Means (LTMs), while few station in the northern parts of the country reported positive anomalies in comparison to the long term mean LTM (1981-2018).

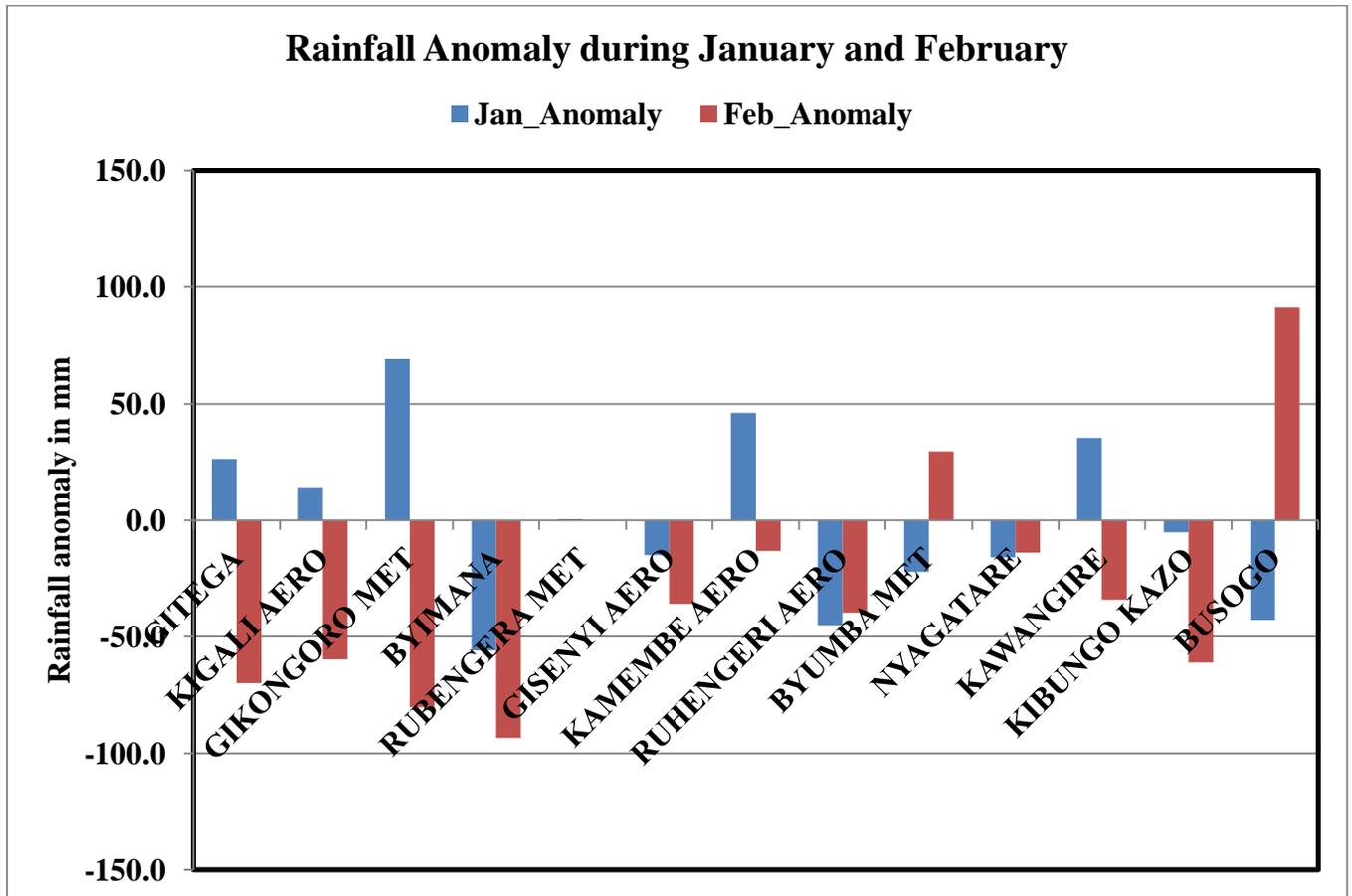
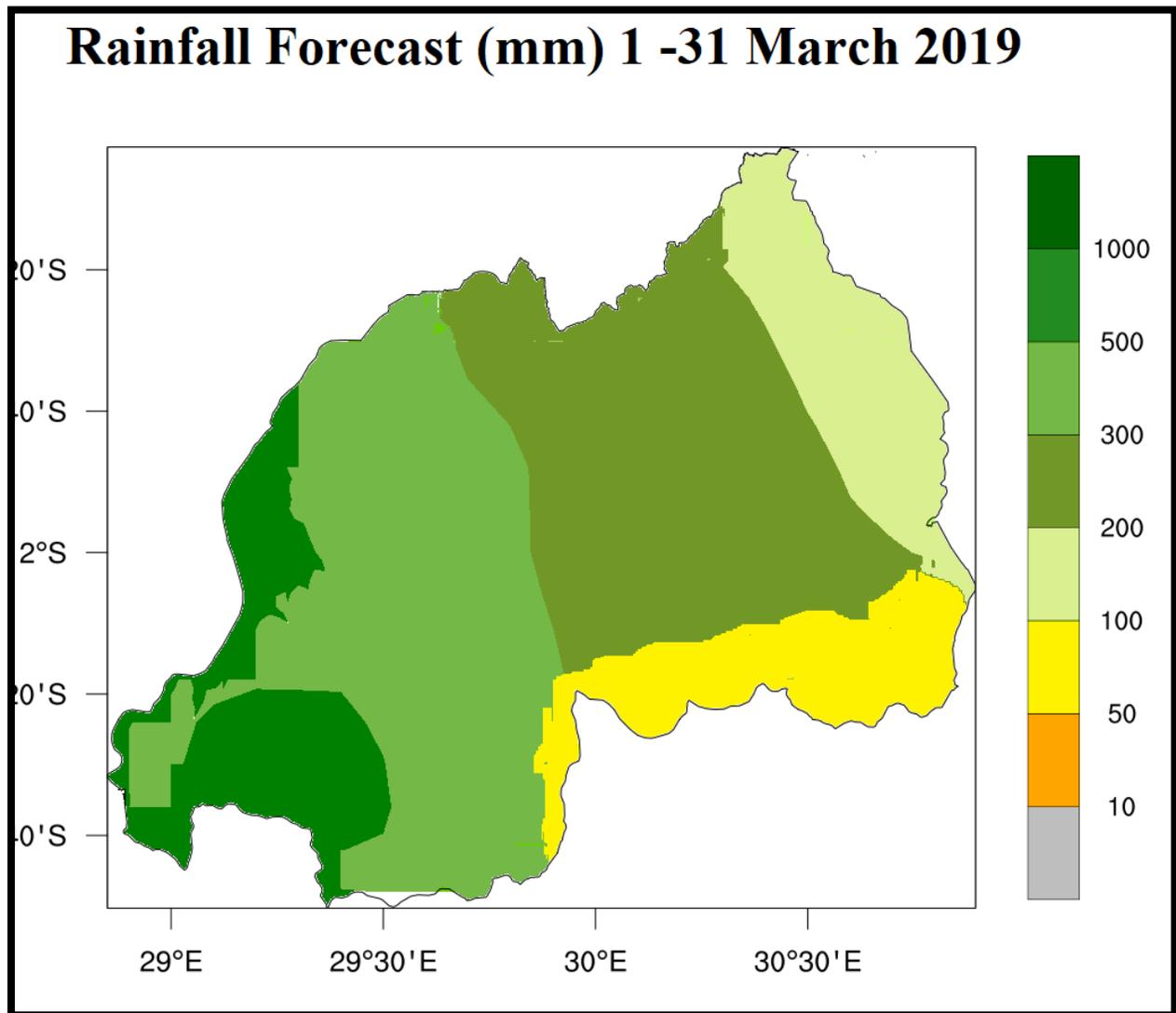


Figure.3: Anomalies of January and February 2019

WEATHER OUTLOOK FOR MARCH 2019

The climate outlook forecast for March 2019 is mainly based on analysis of products derived from WRF (Weather Research Forecasting) model and Geographical Climate outlook Forum (GEOCOF). The model was based on Sea Surface Temperature Anomalies (SSTAs), long mean rainfall for March as well as Sea Surface Temperature (SST) gradients and IOD (Indian Ocean Dipole).

The forecast indicates that most of the country is likely to experience near-normal to above normal rainfall during the month of March 2019 as depicted in figure below.



The specific outlook for different places is as follows:

Kigali City: It is likely to receive near-normal rainfall with a tendency to above-normal (slightly enhanced) rainfall, the expected range is between 100-120mm, the rainfall is expected to enhance during the month of April to May 2019

Eastern Region: Expected to experience near normal rainfall with likelihood of pick up during the second dekad of March, the expected range is between 90-100mm,

Southern Region: Will experience near normal rainfall with a tendency of above normal rainfall, while in extreme south western part of the region the expected range is between 120-180mm,

Northern and Western Region: It is likely to experience near normal to above normal rainfall, whereas much rainfall is likely increase during the month of March 2019 with a range between 150-200mm, The distribution in time and space is expected to be generally good in most places.

POTENTIAL IMPACTS

The expected good rainfall performance during March 2019 will lead to various impacts which are highlighted below:

- Improved agricultural activities in several parts of the country and more so over the Western, Northern and South western region.
- Flash floods are very likely to occur in Western, and Northern Highlands due to the expected enhanced rainfall in these areas, Emergency management are therefore, advised to stick by in order to ensure contingency plans and strategies are in place to avoid such incidences
- Improved vegetation cover due enhanced rainfall over most parts of the country especially in the Northern and Western region are expected. People are encouraged to plant more trees in order to increase forest cover.

N.B: This forecast should be used in conjunction with the daily (24-hour), Three (3), Five (5) Seven (7) and ten days forecasts issued by the Rwanda Meteorology Agency (Meteo Rwanda)

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