NIGERIAN METEOROLOGICAL AGENCY

NATIONAL WEATHER FORECASTING AND CLIMATE RESEARCH CENTRE,
BILL CLINTON DRIVE, NNAMDI AZIKIWE INTERNATIONAL
AIRPORT, P.M.B. 615, GARKI, ABUJA, NIGERIA

Agrometeorological Bulletin No. 8, Dekad 2, March (11 –20) 2023

ISSN: 2315-9790

Summary

This edition presents the second dekad publication of the agro-meteorological bulletin for March, 2023. The summary of the rainfall and temperature outlook are presented hereunder:

- The highest amount of rainfall recorded in this dekad was 188.5 mm in parts of Akwa Ibom state while the lowest of 1.6 mm was recorded in parts of Kogi state. During the dekad, the number of rain days varied from 1 to 7 days with Bayelsa state having the highest occurrence.
- Most parts of Nigeria experienced below normal to normal rainfall except for some parts of Lagos, Edo, Bayelsa, Akwa Ibom, Taraba, Cross River, Rivers, Enugu and Delta states which experienced above normal rainfall.
- The country experienced below normal to normal soil moisture conditions, except parts of Lagos, Bayelsa, Edo and Akwa Ibom states which were above normal.
- The highest and lowest maximum (daytime) temperature values of 40.2°C and 30.8°C were recorded over Adamawa and Cross River states accordingly. Normal to warmer temperature anomalies were observed across the country except parts of Ekiti, Osun, Ondo, Edo, Anambra, Cross River, Benue, Kogi, Nasarawa and Delta states which experienced colder temperatures (negative anomalies).
- The lowest nighttime temperature of 14.7°C was recorded in Jigawa state while the highest of 25.3°C was recorded in Adamawa state. Normal to warmer nighttime temperature anomalies were observed across the country. However, some parts of Anambra, Cross River, Kano, Jigawa, Oyo Ogun, Yobe, Bauchi and Delta states experienced colder temperatures (negative anomalies).
- The Inter-Tropical Discontinuity (ITD) is projected at an average position of 12.0^{0}N creating chances for rainfall and thunderstorms activities.

The NiMet Seasonal Climate Prediction (SCP) is open to the public for reference. Further weather information is found on the NiMet website www.nimet.gov.ng, NiMet App (available on Google Play and Apple Store), or the nearest NiMet offices in all the states in the country and the FCT.

1.0 Rainfall Pattern

The observed rainfall amount, rain-day, comparison with normal, and their departures from the 30-year average for the second dekad are highlighted in this section.

1.1 Rainfall Amount

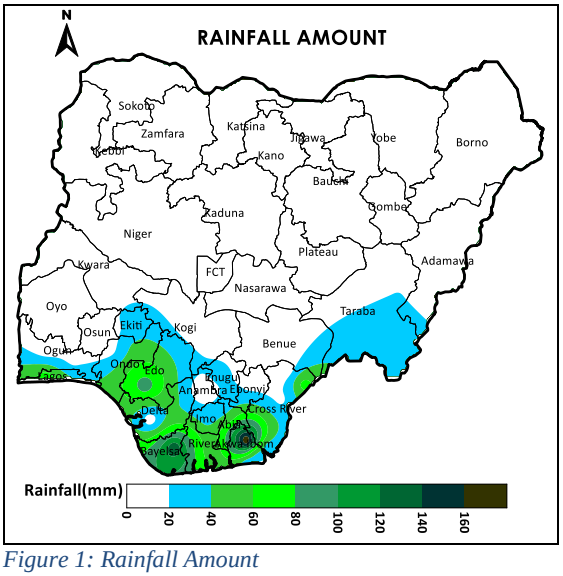

Figure 1: Rainfall Amount

The cumulative rainfall amount across Nigeria for the second dekad of March 2023 is shown in Figure 1. The lowest amount of rainfall recorded was 1.6 mm over Kogi state while the highest rainfall amount of 188.5 mm over Akwa Ibom state.

However, Uyo, Yenagoa and Benin recorded the highest rainfall amount of 188.5 mm, 137.3 mm and 94.3 mm respectively.

1.2 Rainfall Departure from Normal

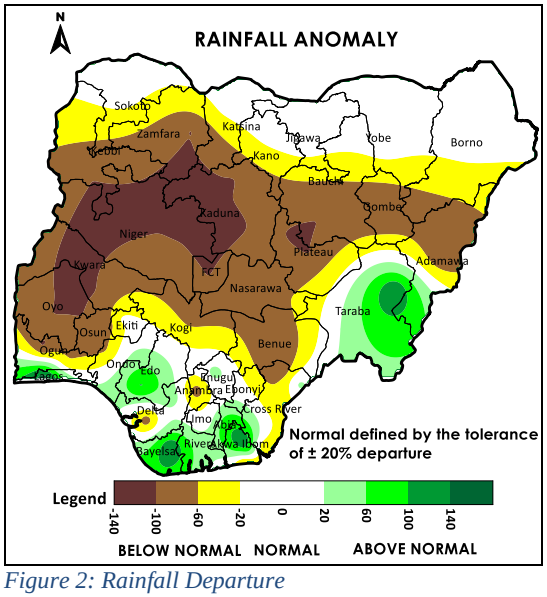

Figure 2: Rainfall Departure

The deviation of the amount of rainfall from the average over the past 30 years is shown in Figure 2. Most parts of Nigeria experienced below normal (i.e., negative anomalies) to normal rainfall except for some parts of Lagos, Edo, Bayelsa, Akwa Ibom, Taraba, Cross River, Rivers, Enugu and Delta states which experienced above normal rainfall (i.e., positive anomalies).

1.3 Comparison of Actual with Normal Rainfall for the Second Dekad of March 2023

The charts (Figures 3A and 3B) present the comparison of the actual rainfall amounts recorded to the long term normal (1991-2020) for second dekad.

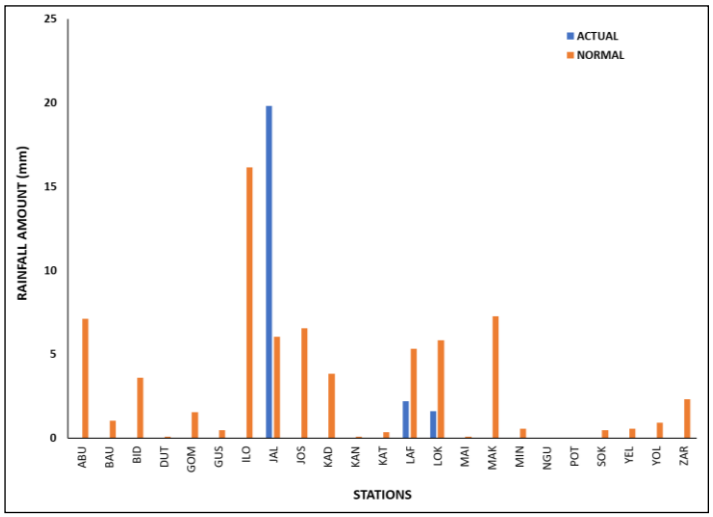

Figure 3A: Comparison of Normal with Rainfall in the Northern part of Nigeria

Figure 3A shows that most places in the North received zero to less rainfall relative to the normal (1991-2020 average) with the exception of Taraba state.

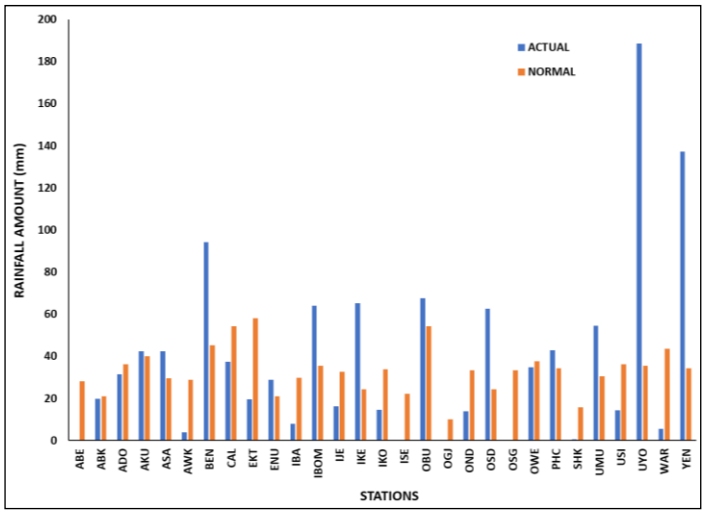

Figure 3B: Comparison of Normal with Rainfall in the Southern part of Nigeria

Figure 3B depicts that the actual rainfall amounts in the south were above normal, with the exception of parts of Delta, Oyo, Ogun, Cross River, Ondo, Anambra, Ebonyi and Imo states where rainfall amount were below normal (1991-2020 average).

1.4 Number of Rain Days

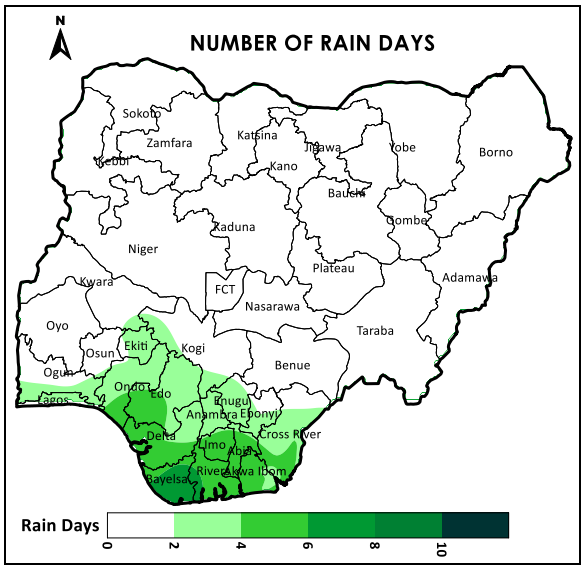

Figure 4: Number of Rain Day.

The distribution of the number of rain days over the country for the second dekad of March 2023 is presented in Figure 4.

The number of rain days throughout the dekad ranged from one (1) to seven (7), with Bayelsa state having the highest occurrence.

2.0 Soil Moisture Conditions in the Second Dekad of March 2023

This section highlights the available soil moisture conditions around the country during the second dekad of March 2023.

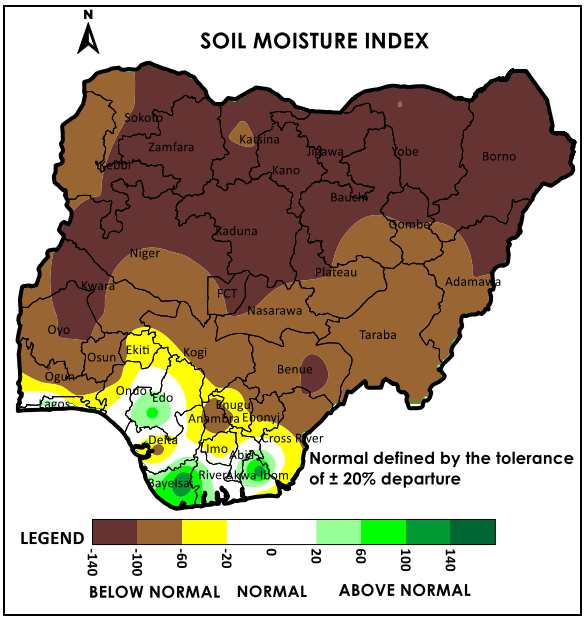

Figure 5: Soil Moisture Index (SMI)

Figure 5 shows that the entire country experienced below normal to normal soil moisture conditions, except parts of Lagos, Bayelsa, Edo and Akwa Ibom states which were above normal.

3.0 Temperature Trend

This section focuses on the maximum and minimum temperature trend across the country and its departures from the 30-year average.

3.1 Maximum Temperature Trend

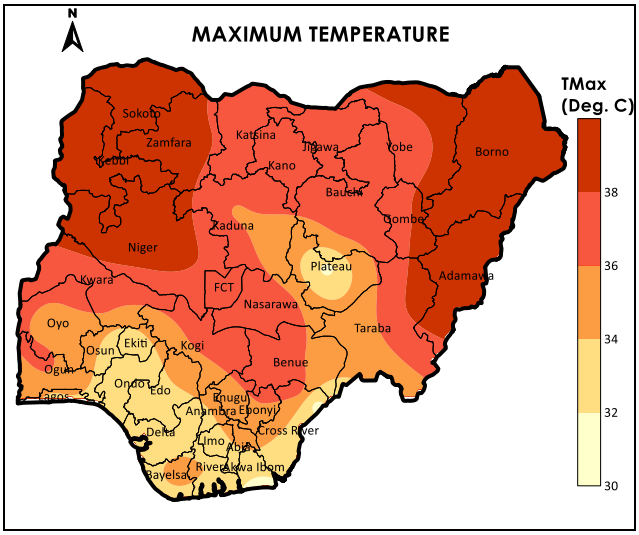

Figure 6: Maximum Temperature

Figure 6 illustrates the maximum temperature during the second dekad.
The highest and lowest maximum (daytime) temperature values of 40.2°C and 30.8°C were recorded over Adamawa and Cross River states respectively.

3.2 Maximum Temperature Departure from the Normal (30-year Average)

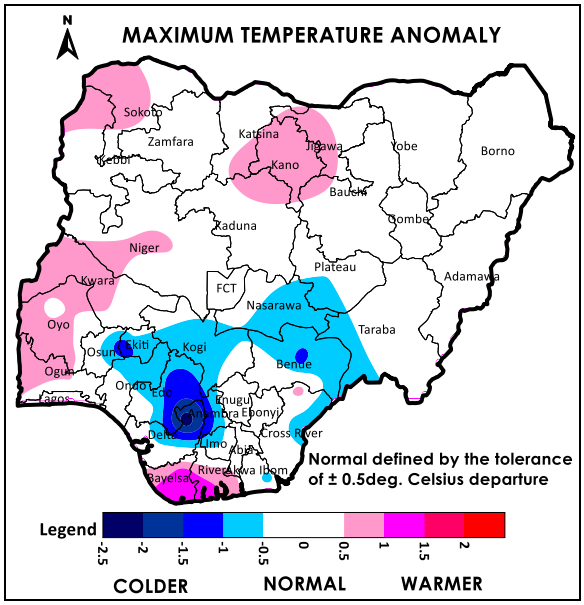

Figure 7: Maximum Temperature Anomaly

Figure 7 depicts the maximum temperature anomaly for the second dekad.
During the dekad, normal to warmer temperature anomalies were observed across the country except parts of Ekiti, Osun, Ondo, Edo, Anambra, Cross River, Benue, Kogi, Nasarawa and Delta states which experienced colder temperatures (negative anomalies).

3.3 Minimum Temperature Trend

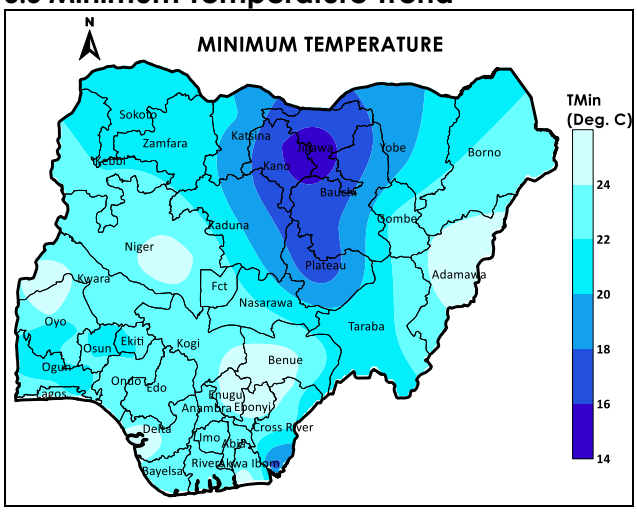

Figure 8: Minimum Temperature

The minimum temperature during the second dekad is depicted in Figure 8.

The lowest minimum (nighttime) temperature of 14.7°C was recorded in Jigawa state while the highest of 25.3°C was recorded in Adamawa state.

3.4 Minimum Temperature Departure from the Normal (30-year Average)

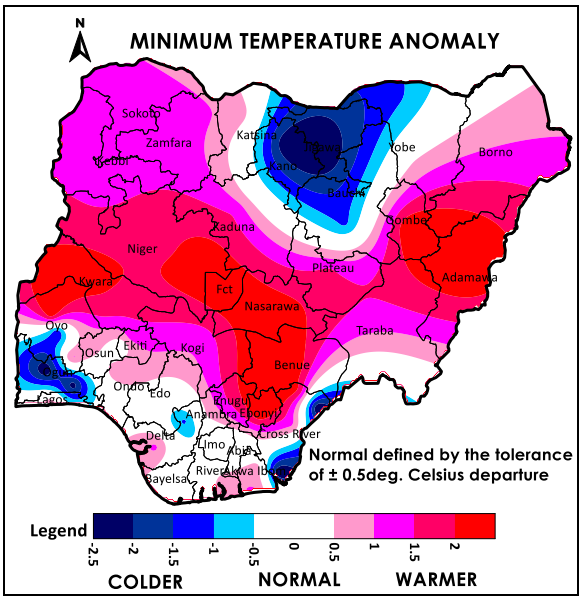

Figure 9: Minimum Temperature Anomaly

The minimum temperature anomaly during the second dekad is depicted in Figure 9.
Normal to warmer nighttime temperature anomalies were observed across the country. However, some parts of Anambra, Cross River, Kano, Jigawa, Oyo Ogun, Yobe, Bauchi and Delta states experienced colder temperatures (negative anomalies).

4.0 Weather/Agricultural outlook for the Third Dekad (21-31) of March 2023

4.1 Weather Outlook

The Inter-Tropical Discontinuity (ITD) is projected to be at an average position of 12.0^{0}N creating chances for rainfall and thunderstorms activities across the south and some parts of central states over the next dekad. The North will be under the influence of the northeasterly wind accompanying with dryness.

4.2 Advisories

- Farmers in the north should continue to irrigate their field crops as rainfed season is yet to commence
- Storage and transportation of perishables should be done in the evening to avoid loses
- Preparation for the new rainy season is expected to continue in the central part of the country.
- Poultry and Livestock farmers should provide adequate drinking water and conducive environment for their animals due to the changes in temperature.
- Farmers are advised to work closely with Agriculture Extension Officers and other relevant stakeholders to have a better understanding of weather patterns and how they affect agricultural activity.
- Further weather information can be access on the NiMet website, www.nimet.gov.ng., the NiMet weather App (available on Google Play and Apple Store) or the nearest NiMet offices in all the states of the country and the FCT.

4.3 Agricultural Activities

- Farmers in the north are advised to continue dry season farming.
- Farmers in the north should continue dry season harvesting of crops such as wheat, onions
- Planting of tuber crops e.g.; yam is ongoing in most central states.
- The planting of cereal crops and tubers such as maize and yam, among others, is ongoing in the southern parts of the country.

Kindly send feedback to:
The Director-General/CEO,
Nigerian Meteorological Agency (NiMet),
National Weather Forecasting and Climate Research Centre, Nnamdi Azikiwe International Airport, PMB 615 Garki, Abuja.
E-mail: *agrometbulletin@nimet.gov.ng;*
NiMet WEB SITE: *www.nimet.gov.ng*
Phone: +2348065650516 & +2348037880190