

Summary

The agro-meteorological bulletin for March 2023 is presented in this edition as the third dekad publication. Here is an overview of the rainfall and temperature outlook:

- The observed rainfall amounts varied across the country, ranging from 3.0 mm over Niger state to 286.7 mm over Akwa Ibom state. The number of rain days varied from 1 to 9 days with Akwa Ibom state having the highest occurrence. Most parts of the country experienced normal to above normal rainfall anomalies.
- Most parts of the country experienced below normal to normal soil moisture conditions.
- The maximum temperature ranges from 29.4°C to 39.4°C over Plateau and Adamawa states respectively. Cooler to normal daytime temperature anomalies were observed across the country.
- The lowest nighttime temperature of 16.5°C was recorded in Cross River state while the highest of 26.4°C was recorded in Adamawa state. Normal to warmer nighttime temperature anomalies were observed across the country.
- The Inter-Tropical Discontinuity (ITD) is expected to maintain an average position of 10.0°N creating chances for rainfall and thunderstorms activities over the south and some parts of central states.

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

This section highlights the observed rainfall amount, rain-day, comparison with normal, and their deviations from the 30-year average for the third dekad of March 2023.

1.1 Rainfall Amount

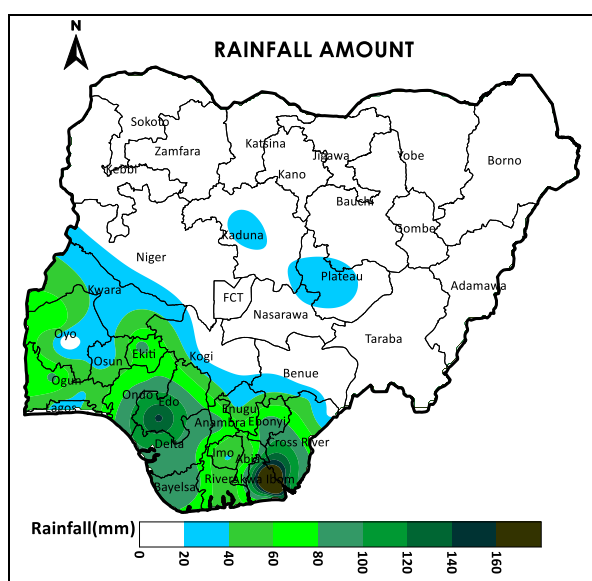


Figure 1: Rainfall Amount

The total amount of rainfall across Nigeria for the third dekad of March 2023 is shown in Figure 1. The maximum amount of rainfall recorded was 286.7 mm over parts of Akwa Ibom state, while

the lowest amount of 3.0 mm was recorded over parts of Niger state.

However, rainfall amounts greater than 100mm were recorded in parts of Akwa Ibom, Edo, Cross River, and Bayelsa states.

1.2 Rainfall Departure from Normal

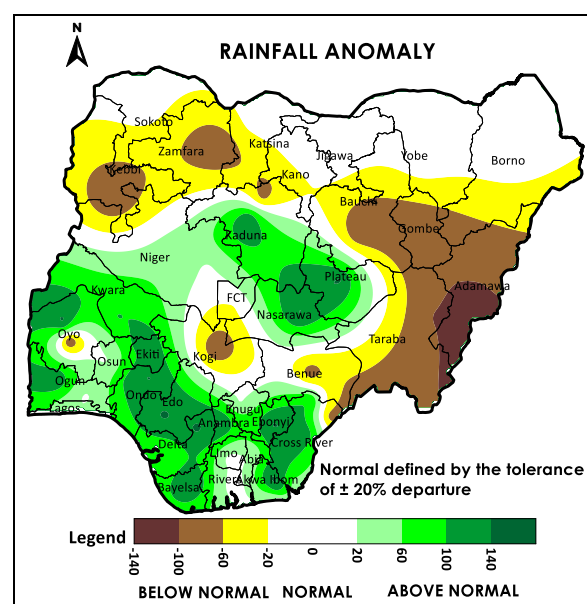


Figure 2: Rainfall Departure

The deviation of the rainfall amount from the average over the past 30 years is shown in Figure 2.

The increase in the amount of rainfall in this dekad resulted to the surplus of rainfall anomalies experienced in most parts of the country when compared to the previous dekad.

Normal to above normal rainfall (i.e., positive anomalies) were experienced in most parts of the country except for Iseyin, Obudu, and some parts of Kebbi, Zamfara, Gombe, Kogi, Adamawa, Taraba, Benue, Kano, Katsina and Bauchi states were below normal (i.e., negative anomalies).

1.3 Comparison of Actual Rainfall and the Normal (1991-2020) for the Third Dekad of March 2023

The actual rainfall amount recorded and the long-term average (1991-2020) for the third dekad are compared in Figures 3A and 3B.

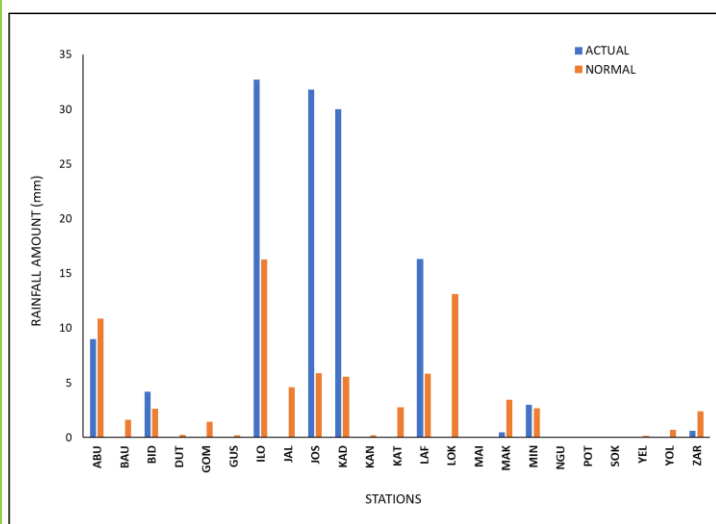


Figure 3A: Comparison of Normal with Rainfall in the Northern part of Nigeria

Figure 3A shows that most northern states were below average, with the exception of Kwara, Nasarawa, Niger, Plateau, and Kaduna states, which were above average when compared to the normal (1991-2020 average).

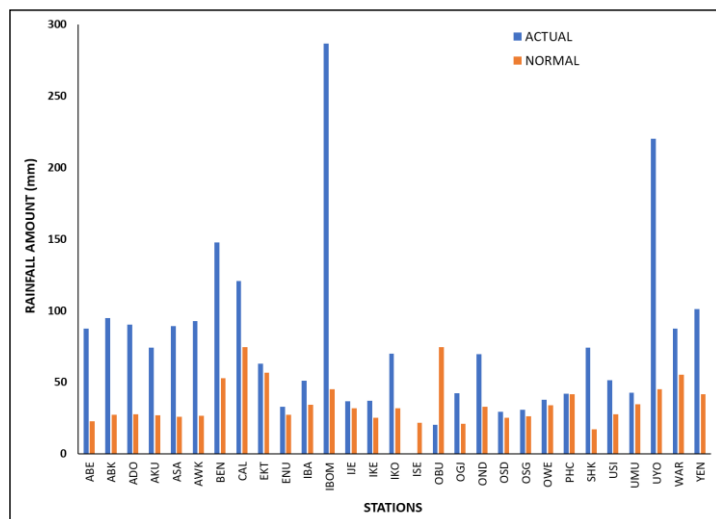


Figure 3B: Comparison of Normal with Rainfall in the Southern part of Nigeria

Figure 3B depicts that actual rainfall amount in the south were above normal, with the exception of Obudu and Iseyin, where rainfall amounts were below normal (1991-2020 average).

1.4 Number of Rain Days

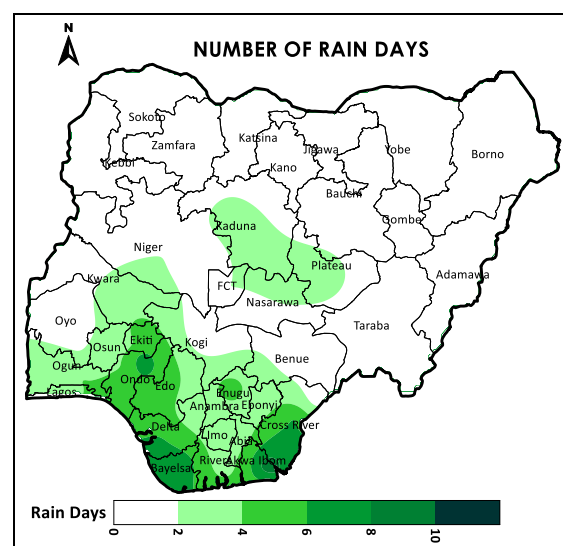


Figure 4: Number of Rain Day.

Figure 4 shows the distribution of the number of rain days across the country for the third dekad of March 2023.

The number of rain days throughout the dekad ranged from one (1) to nine (9), with parts of Akwa Ibom state having the highest occurrence. Rainfall in parts of Cross River, Akwa Ibom, Ondo, Bayelsa, Edo, and Ekiti states were evenly distributed between five (5) – nine (9) days.

2.0 Soil Moisture Conditions in the Third Dekad of March 2023

This section focuses on the available soil moisture conditions around the country during the third dekad of March 2023.

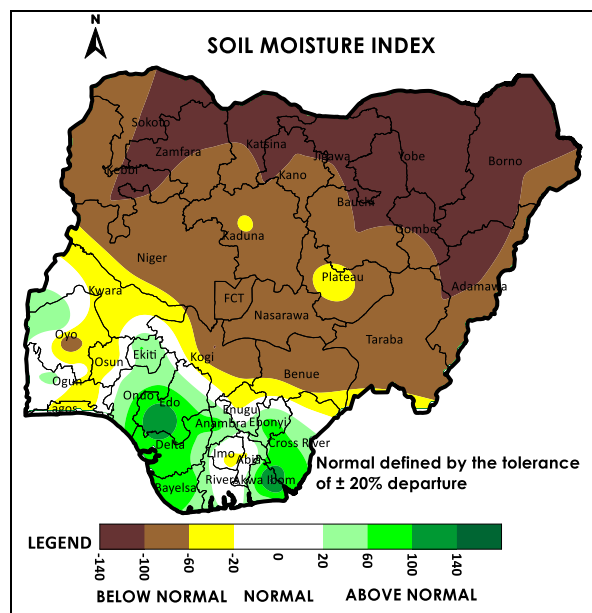


Figure 5: Soil Moisture Index (SMI)

The soil moisture conditions were below normal to normal across the country, with the exception of Ondo, Ekiti, Delta, Cross River, Ogun, Anambra, Ebonyi, Bayelsa, Edo, and Akwa Ibom states which were above normal during the dekad.

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

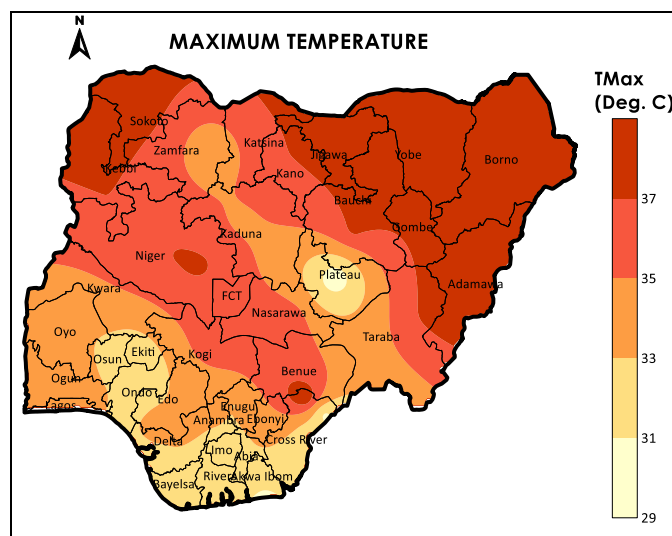


Figure 6: Maximum Temperature

Figure 6 illustrates the maximum temperature during the third dekad.

In the dekad under review, the maximum temperature ranges from 29°C to 39°C. Adamawa state recorded the maximum daytime temperature of 39.4°C, while Plateau state had the lowest, 29.4°C.

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

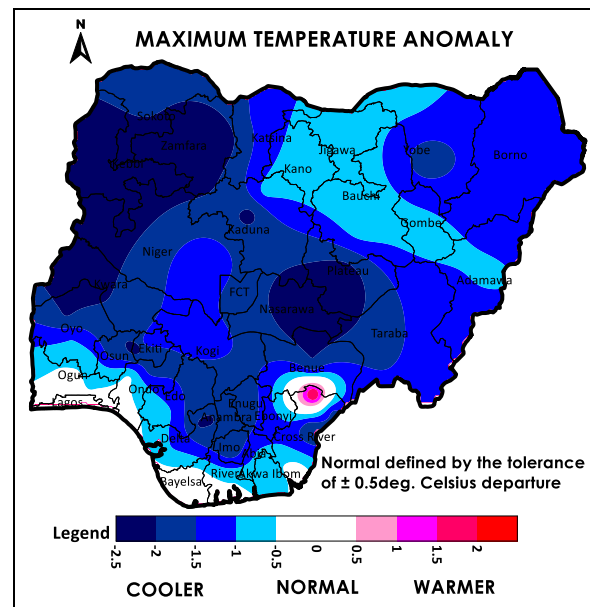


Figure 7: Maximum Temperature Anomaly

Figure 7 illustrates the maximum temperature anomaly for the third dekad.

During the dekad, the entire country observed cooler (negative anomalies) to normal maximum temperatures anomalies, except parts of Cross River state which experienced warmer temperature (positive anomalies).

3.3 Minimum Temperature Trend

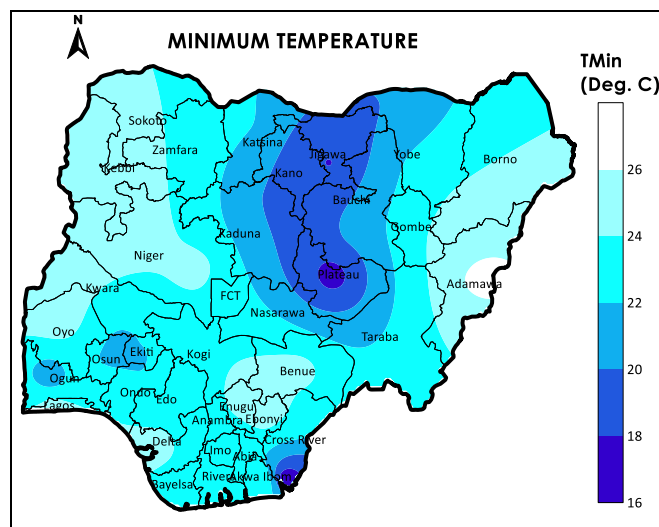


Figure 8: Minimum Temperature

In Figure 8, the minimum (nighttime) temperature for the third dekad is shown. Cross River state had the lowest nighttime temperature of 16.5°C, while Adamawa state had the highest of 26.4°C.

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

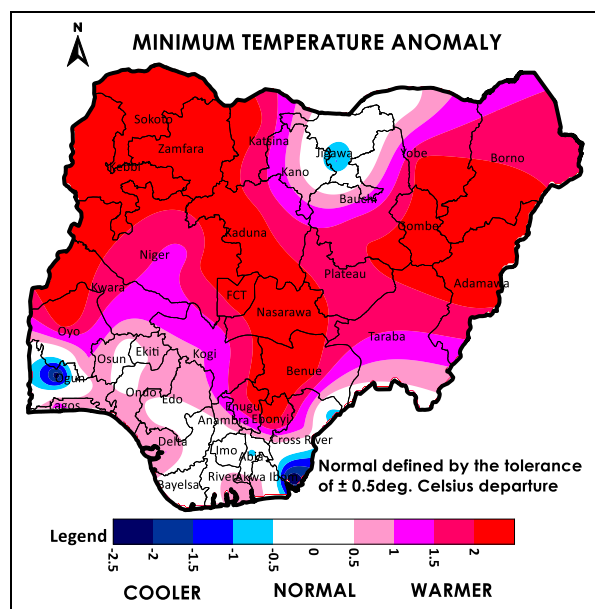


Figure 9: Minimum Temperature Anomaly

The minimum temperature anomaly during the third dekad is depicted in Figure 9.

Normal to warmer nighttime temperature anomalies were observed across the country. However, some parts of Cross River, Jigawa,

Ogun, and Abia states experienced colder temperatures (negative anomalies).

4.0 Weather/Agricultural outlook for the First Dekad (1-10) of April 2023

4.1 Weather Outlook

The Inter-Tropical Discontinuity (ITD) is projected to be at an average position of 10.0°N creating chances for rainfall and thunderstorms activities across the south and some parts of central states while the North is expected to be sunny over the next dekad.

4.2 Advisories

- Farmers in the north should continue to irrigate their field crops as rainfed season is yet to commence
- The high temperatures coupled with increasing relative humidity is expected to follow this seasonal weather transition phase which may result in thermal discomfort and heat stress for livestock and poultry, as well as the associated risks across end-to-end agricultural value chain.
- It is advised that farmers keep their animals particularly poultry birds warm, to mitigate the effects of the period's cold temperatures.
- Storage and transportation of perishables should be done in the evening to avoid losses
- Preparation for the new rainy season is expected to continue in the central part of the country.
- 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 activities.
- 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

- In the north, harvesting of crops like wheat, pepper, and onions is still going on.
- Planting of tuber crops e.g.; yam is ongoing in most central states.
- Vegetables, wheat, rice, sugar cane, maize, green beans, carrots, cabbage, lettuce and tuber crops are some of the most regularly cultivated crops during this period of irrigation farming.
- 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:
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