

## Summary

This edition presents the first 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 97.3 mm in part of Bayelsa state while the lowest of 3.0 mm was recorded in parts of Oyo state. During the dekad, the number of rain days varied from 1 to 7 days with Cross River state having the highest occurrence.
- Most parts of the northern states experienced below normal to normal rainfall anomalies while most parts of southern states experienced normal to above normal rainfall anomalies.
- The country experienced below normal to normal soil moisture conditions, except parts of Cross River, Lagos and Imo state which were above normal conditions.
- The highest and lowest temperature values of 41.1°C and 30.2°C were recorded over Sokoto and Akwa Ibom states respectively. Normal to warmer temperature anomaly was observed across the country except parts of Ekiti, Osun, Ondo, Edo, Oyo, Cross River and Delta states that experienced colder maximum temperature anomaly.
- The lowest minimum (nighttime) temperature of 17.2°C was recorded in Jigawa state while the highest of 27.2°C was recorded in Kebbi state. Normal to warmer nighttime temperature anomalies were observed across the country.
- The ITD is expected to maintain an average position of Latitude 10.0°N.

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](http://www.nimet.gov.ng), NiMet Weather 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 first dekad are highlighted in this section.

### 1.1 Rainfall Amount

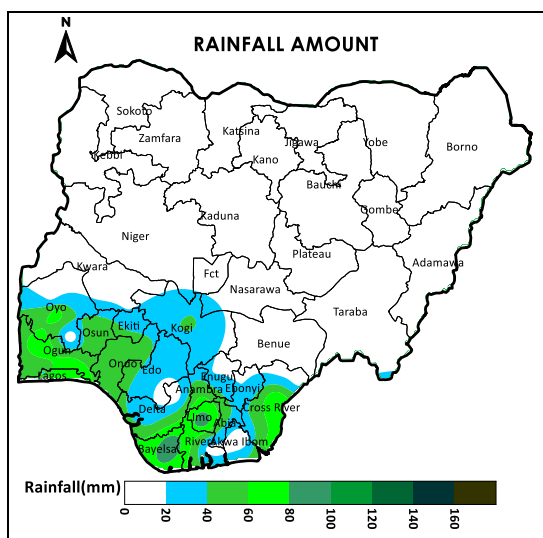


Figure 1: Rainfall Amount

Figure 1 shows the significant amount of rainfall that was recorded during the dekad. The highest amount of rainfall was recorded in part of Bayelsa

state with a value of 97.3 mm while the lowest value of 3.0 mm was recorded in part of Oyo state.

### 1.2 Rainfall Departure from Normal

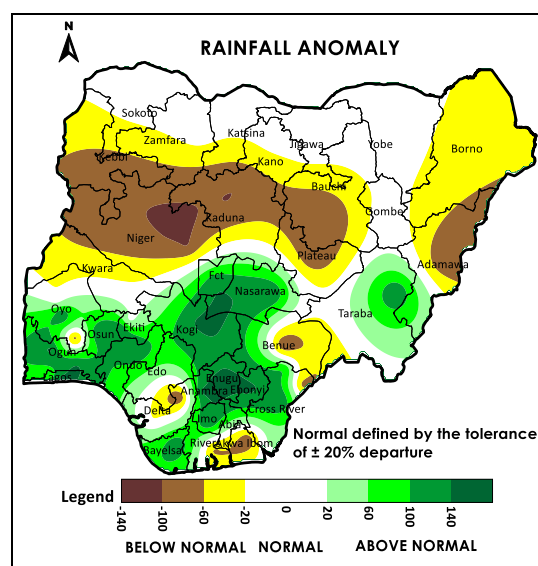


Figure 2: Rainfall Departure

Figure 2 illustrates the deviation of the amount of rainfall from the average over the past 30 years. The northern states experienced below normal to normal rainfall anomalies except parts of

Nasarawa, Kogi and Taraba states and the FCT which had above normal anomaly. The southern states experienced normal to above normal rainfall anomalies except parts of Oyo, Rivers, Delta, and Akwa Ibom states which experienced below normal conditions.

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

The following charts (Figures 3A and 3B) present a comparison of the actual rainfall amounts recorded against the average amount of rainfall for first dekad.

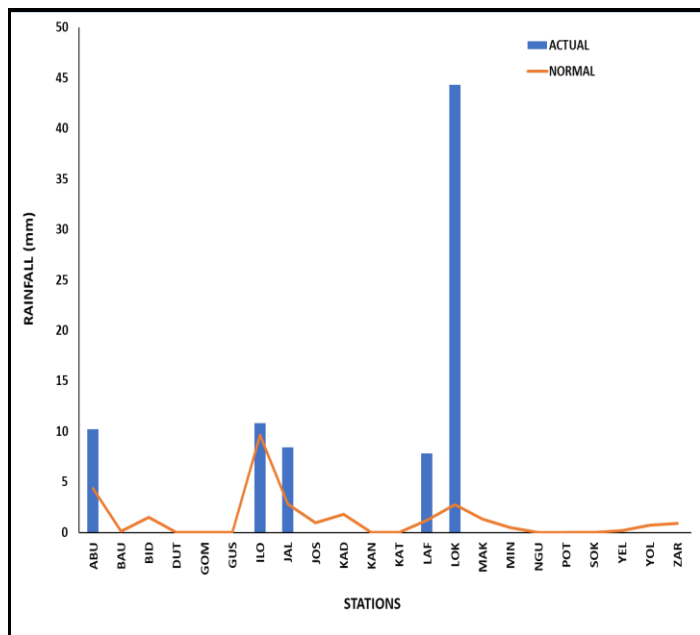


Figure 3A: Comparison of Normal with Rainfall in the Northern part of Nigeria

Within the dekad, figure 3A shows that Kogi, Kwara, Taraba and Nasarawa states and the FCT recorded actual rainfall amounts higher than the normal over the north.

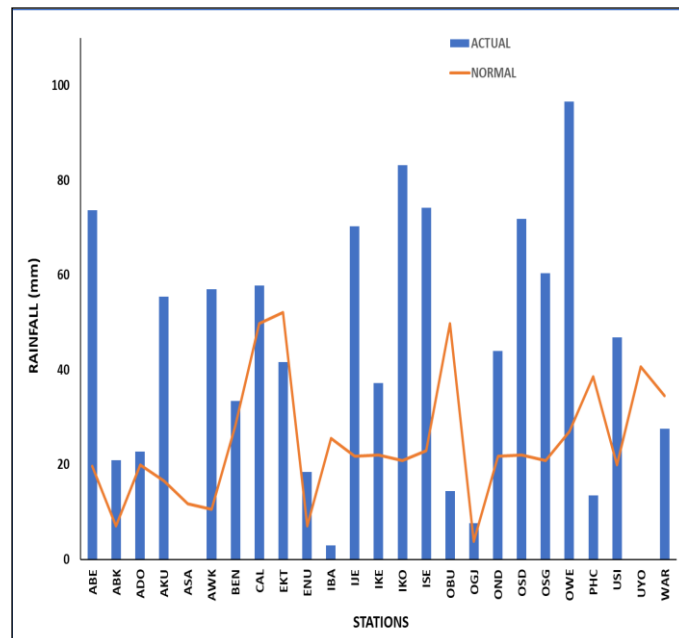


Figure 3B: Comparison of Normal with Rainfall in the Southern part of Nigeria

Figure 3B shows that the actual rainfall amounts across the southern states were more than the normal except for Delta, Oyo, Rivers, and Akwa Ibom states were less.

### 1.4 Number of Rain Days

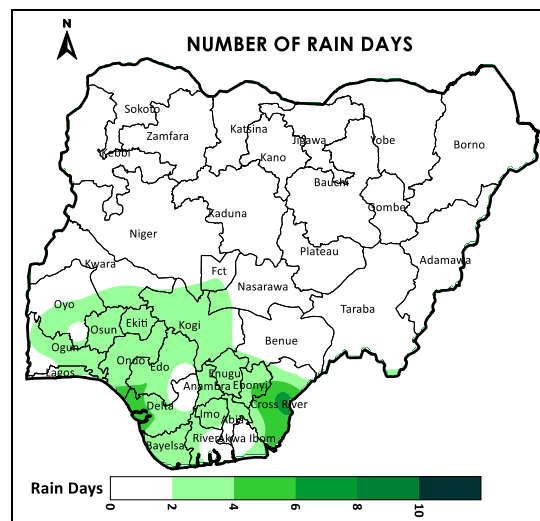


Figure 4: Number of Rain Day.

The distribution of the number of rain days for the first dekad of March 2023 is shown in Figure 3. During the dekad, number of rain days varied from 1 to 7 days with Cross River state having the highest occurrence.

## 2.0 Soil Moisture Conditions in the First Dekad of March 2023

The available soil moisture condition across the country during the first dekad is highlighted in this section.

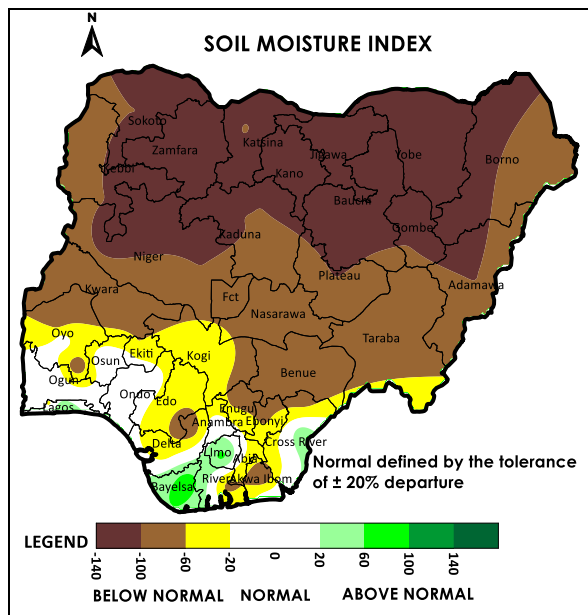


Figure 5: Soil Moisture Index (SMI)

Figure 5 shows that the entire country is still below normal to normal soil moisture conditions, except parts of Cross River, Lagos, Bayelsa and Imo states which were above normal conditions.

## 3.0 Normalized Difference Vegetation Index (NDVI)

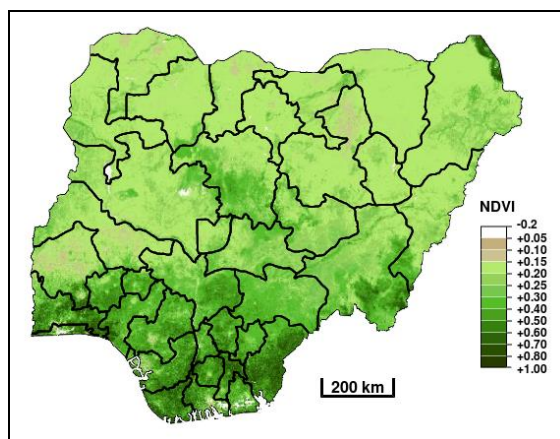


Figure 6: Normalized Difference Vegetation Index (NDVI)

Figure 6 shows the level of vegetation cover across the country. The figure shows more improvement in the vegetation cover particularly within the southern parts of the country.

## 4.0 Temperature Trend

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

### 4.1 Maximum Temperature Trend

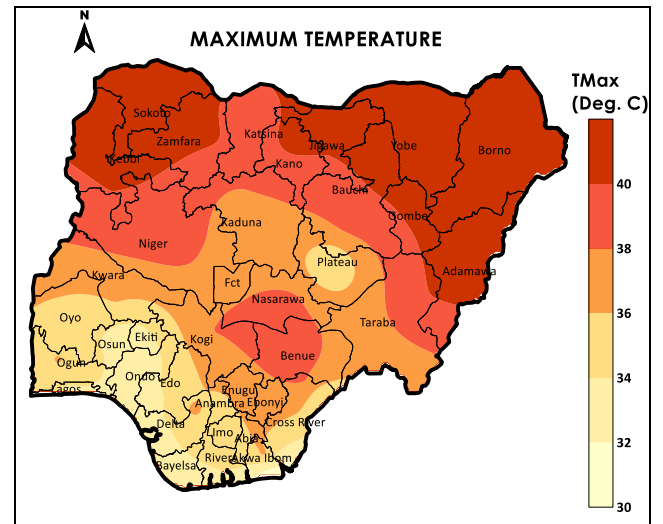


Figure 7: Mean Maximum Temperature

Figure 7 illustrates the maximum temperature during the first dekad.

The maximum (daytime) temperature ranges between 30°C to 41°C during the dekad. The Figure shows that most parts of Sokoto, Adamawa, Yobe, Kano, Zamfara, Gombe and Jigawa had 40°C and above mean maximum temperature.

The highest and lowest mean maximum temperature values of 41.1°C and 30.2°C were recorded over Sokoto and Akwa Ibom states accordingly.

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

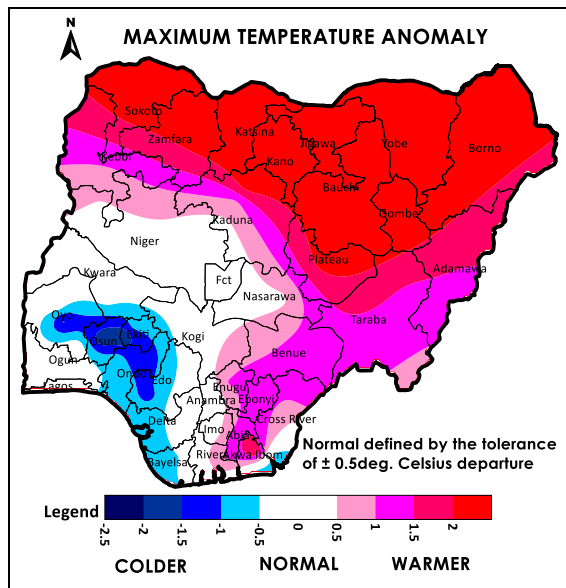


Figure 8: Maximum Temperature Anomaly

Figure 8 depicts the temperature anomaly for the first dekad.

During the dekad, normal to warmer temperature anomalies were observed across the country except parts of Ekiti, Osun, Ondo, Edo, Oyo, Cross River, Bayelsa and Delta states which experienced colder temperatures (negative anomalies).

## 4.3 Minimum Temperature Trend

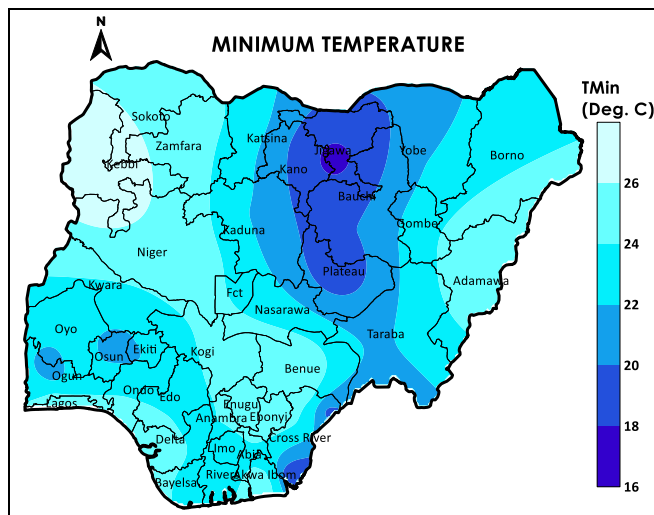


Figure 9: Minimum Temperature

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

The lowest minimum (nighttime) temperature of 17.2°C was recorded in Jigawa state while the highest of 27.2°C was recorded in Kebbi state.

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

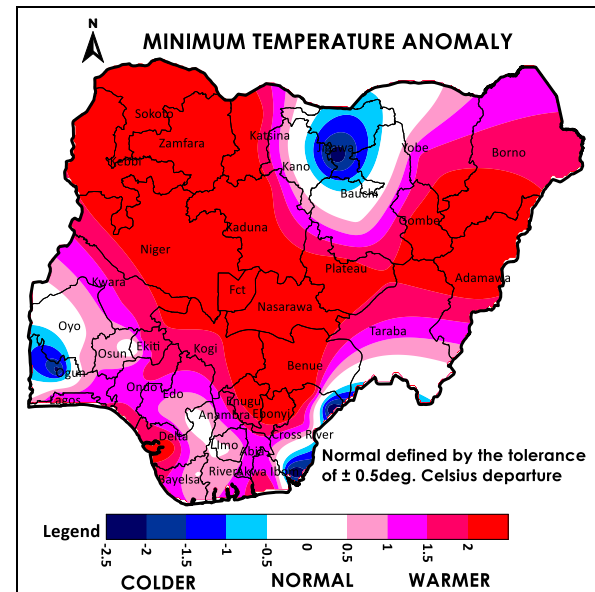


Figure 10: Minimum Temperature Anomaly

The minimum temperature anomaly during the first dekad is depicted in Figure 10.

Normal to warmer nighttime temperature anomalies were observed across the country with the exception of some parts of Jigawa, Cross River, Kano, Oyo and Ogun states which experienced colder temperatures (negative anomalies).

## 5.0 Weather/Agricultural outlook for the Second Dekad (11-20) of March 2023

### 5.1 Weather Outlook

A continuous northward pull of the Inter-Tropical Discontinuity (ITD) is anticipated at an average position of 10.0°N creating chances for rainfall and thunderstorm activities across the south and some parts of central states over the next dekad.

### 5.2 Advisories

- Farmers are advised to provide adequate drinking water, regular sanitation and conducive environment to their poultry and livestock to minimize the effect of the changing temperatures.
- Farmers in the north should continue to irrigate their field crops as rainfed season is yet to commence.

- It is strongly advised that farmers keep close monitoring against disease outbreaks on their farm due to the increase in temperature that support growth of pest and diseases.
- 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 is available on NiMet website, [www.nimet.gov.ng](http://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.

### 5.3 Agricultural Activities

- In the central states, land preparation for the onset of the season.
- Planting activities of crops such as maize among others is expected to commence in the southern parts of the country.

**Kindly send feedback to:**  
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