

Agrometeorological Bulletin No.5, Dekad 2, February (11 –20) 2014
 ISSN: 2315-9790

SUMMARY

Most parts of the South had deficit rainfall anomalies in the second dekad of February except parts of Lagos, Ado-Ekiti and Umuahia which showed surplus rainfall anomalies. While the northern part continued to have normal rainfall anomaly, the entire country is still remained under deficit soil moisture conditions. However, few stations in the South reported rains, such as Ado-Ekiti (39.3mm in 2 rain-day), Umuahia (29mm in 1 rain-day) and Oshodi (10.6mm in 1 rain-day). The preparation for planting of early maize is expected to start in the extreme southern part of country, while harvesting and packaging of vegetables and rice from the dry season farming is expected to continue in the northern and central parts of the country.

1.0 RAINFALL PARTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

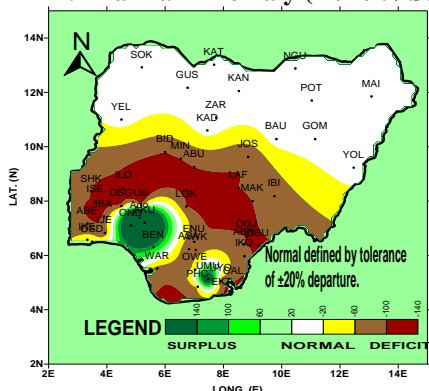
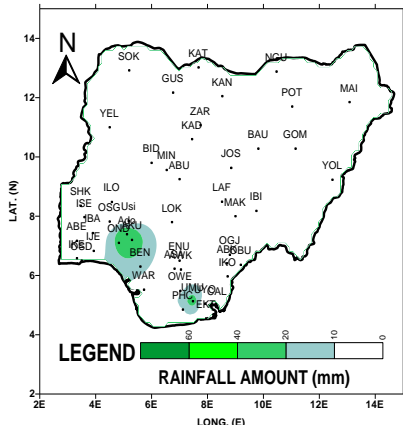


Fig.1: 2ND DEKAD RAINFALL ANOMALIES

Fig.1 above shows the rainfall anomaly over the country and it reveals that the northern and some parts of central states remained normal. Most southern parts had deficit anomalies except Lagos/Oshodi and Ado-Ekiti in the South-west, and Umuahia and its environ in the South-east which had surplus rainfall anomalies.

1.2 Rainfall Amounts



The observed actual rainfall amount measured over the country for the dekad is shown in Fig.2 above. It indicates that very few stations in the South recorded rains. The highest rainfall was recorded in Ado-Ekiti followed by Umuahia and Oshodi with their respective values as 39.3mm, 29mm and 10.6mm.

1.3 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE DEKAD

The comparison of the actual rainfall amounts measured with normal/long term averages during the dekad in the southern part of the country is shown in Fig. 3 below. It can be inferred that the few stations that recorded rains were below normal, except Ado-Ekiti and Umuahia that had above normal rainfall amounts.

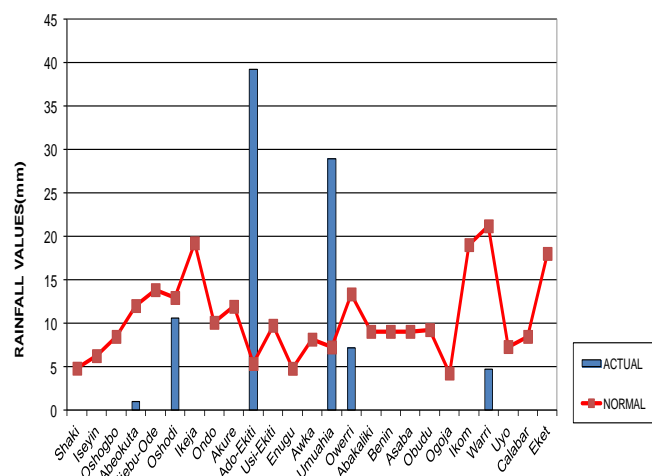


FIG. 3: COMPARISON OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 2 FEBRUARY 2014: FOR SOUTHERN STATES OF NIGERIA.

1.4 Number of Rain Days.

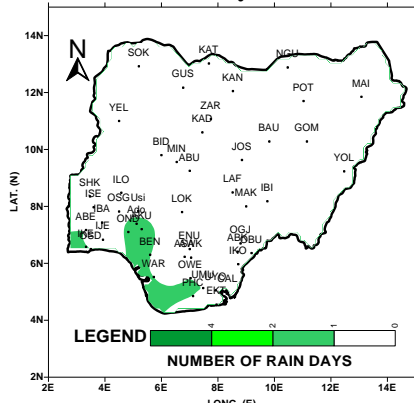


Fig.4: NUMBER OF RAIN DAYS

The Fig. 4 above is the distribution of rainfall across the country and it shows that the few stations in the South that reported rains had 1 to 2 rain-days.

2.0 SOIL MOISTURE CONDITION

Fig. 5 below shows the soil moisture indices across the country and indicates that the whole country was under deficit soil moisture condition. No area was favoured for rain-fed agriculture.

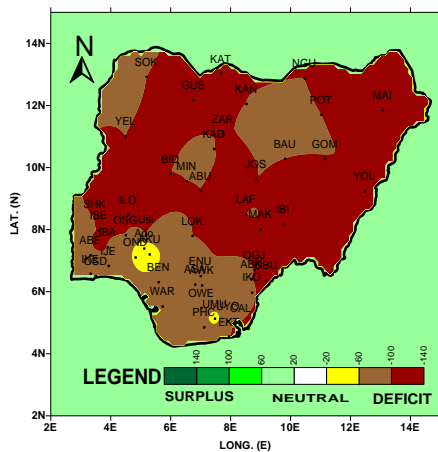


Fig. 5: 2ND DEKAD OF FEBRUARY SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

The maximum temperature anomaly across the country indicates that the country experienced normal -to- warmer maximum temperature anomaly except for few areas in blue (Katsina, Kano, Bauchi, Jos and Eket) that were colder than normal as shown in Fig 6 below.

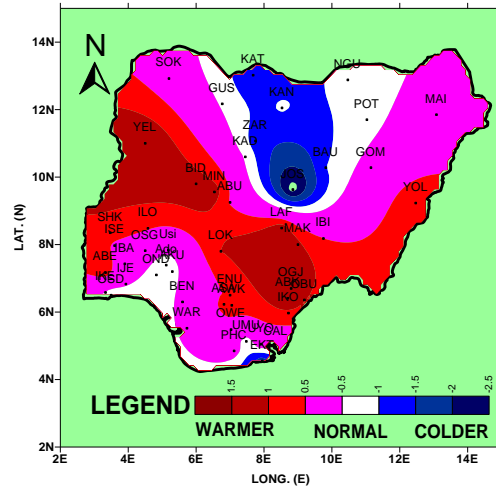


Fig.6: Maximum Temperature Anomaly.

3.2 Maximum Temperature Values

Fig. 7 below depicts the actual mean maximum temperature distribution across the country and it indicates that the northern and southern parts recorded 32°C to 36°C . The middle belt/central areas recorded 36°C and above, e.g. Bida (37.2°C), Lafia (37.5°C), Minna (37.4°C), Yelwa (37.9°C), Yola (36.5°C). Jos recorded the lowest value of 28.6°C .

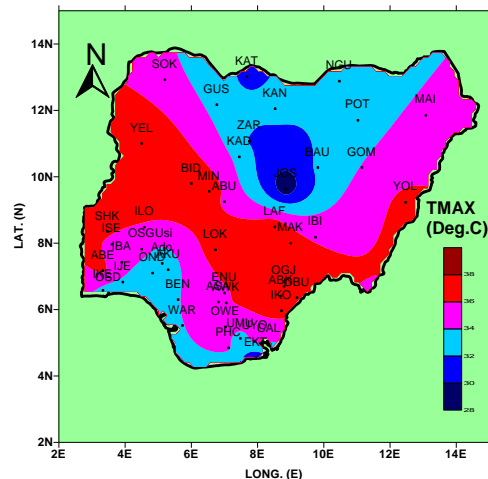


Fig. 7: Mean maximum Temperature

WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 3 (21 TO 28), OF FEBRUARY 2014

4.1 Weather Outlook

The Inter Tropical Discontinuity (ITD)'s position is expected to oscillate between latitudes 9deg. N and 10degN thereby placing the northern and central parts of the country under sunny and dry weather conditions. The inland areas are expected to be sunny and cloudy, while the coastal areas are expected to be partly cloudy/cloudy with localized showers/thunderstorms.

The mean maximum temperature in the North and the central will range from 34 °C to 38 °C, while the mean minimum temperature will be between 22 °C and 24 °C. In the inland and coastal areas, the mean maximum temperatures are expected to lie between 32 °C and 35 °C, while the mean minimum temperature will range from 22 °C to 25 °C.

4.2 Agricultural Activity/Outlook

Preparation of farm land for planting of early maize is expected to start in the extreme southern part of the country. Harvesting and packaging of vegetables and rice are expected to continue in the North and central areas.

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

| STATION | RAINFALL | RAINDAY | PET | TMAX | TMIN | GDD | RAD |
|-----------|----------|---------|------|------|------|-------|------|
| ABEOK | 1 | 1 | 54.5 | 36.4 | 25.3 | 228.7 | 21.4 |
| ABUJA | 0 | 0 | 61.8 | 35.6 | 19.9 | 199.3 | 25.5 |
| AKURE | - | - | - | - | - | - | - |
| ASABA | 0 | 0 | 57.1 | 36.0 | 23.4 | 216.8 | 22.8 |
| AWKA | - | - | - | - | - | - | - |
| BAUCHI | 0 | 0 | 57.8 | 32.4 | 16.4 | 163.7 | 25.4 |
| BENIN | - | - | - | - | - | - | - |
| BIDA | 0 | 0 | 58.7 | 37.2 | 24.1 | 226.3 | 23.1 |
| CALABAR | 0 | 0 | 51.3 | 33.8 | 23.2 | 204.8 | 20.9 |
| EKET | 0 | 0 | 41.2 | 30.6 | 23.4 | 190 | 17.3 |
| ENUGU | 0 | 0 | 61.2 | 35.7 | 20.2 | 199.7 | 25.2 |
| GOMBE | 0 | 0 | 56.2 | 32.9 | 18.6 | 177.8 | 24.1 |
| GUSAU | - | - | - | - | - | - | - |
| IBADAN | 0 | 0 | 52.5 | 34.8 | 24.0 | 214 | 21.1 |
| IJEBU | 0 | 0 | 48.8 | 33.7 | 24.1 | 209 | 19.8 |
| IKEJA | - | - | - | - | - | - | - |
| IKOM | - | - | - | - | - | - | - |
| ILORIN | 0 | 0 | 58.1 | 35.8 | 22.3 | 210.1 | 23.5 |
| ISEYIN | 0 | 0 | 56.7 | 35.5 | 22.8 | 211.4 | 22.9 |
| JOS | 0 | 0 | 53.9 | 28.6 | 12.5 | 125.2 | 25.5 |
| KADUNA | 0 | 0 | 57.5 | 33.4 | 18.4 | 178.7 | 24.6 |
| KANO | 0 | 0 | 64.6 | 32.6 | 9.6 | 130.6 | 30.3 |
| KATSINA | 0 | 0 | 55.9 | 31.6 | 16.0 | 157.6 | 24.9 |
| LAFIA | 0 | 0 | 64.9 | 37.5 | 20.7 | 211 | 26.2 |
| LOKOJA | 0 | 0 | 65.7 | 36.8 | 18.5 | 196.8 | 27.3 |
| MAIDU | - | - | - | - | - | - | - |
| MAKURDI | 0 | 0 | 66.1 | 37.0 | 18.8 | 199 | 27.3 |
| MINNA | 0 | 0 | 61 | 37.4 | 22.9 | 221.3 | 24.2 |
| NGURU | 0 | 0 | 58.2 | 32.7 | 16.1 | 164.1 | 25.6 |
| OGOJA | 0 | 0 | 64 | 37.1 | 20.1 | 206.1 | 26.4 |
| ONDO | - | - | - | - | - | - | - |
| OSHODI | 10.6 | 1 | 43.9 | 32.7 | 24.9 | 207.8 | 17.8 |
| OSOGBO | 0 | 0 | 55.6 | 34.8 | 22.2 | 205.3 | 22.7 |
| OWERRI | 7.2 | 1 | 58.6 | 35.4 | 21.6 | 203.4 | 23.9 |
| PHC | 9.2 | 1 | 54.8 | 34.4 | 22.2 | 202.8 | 22.4 |
| POT | 0 | 0 | 59.2 | 33.0 | 16.2 | 166 | 25.9 |
| SHAKI | 0 | 0 | 59.4 | 36.3 | 22.4 | 213.5 | 23.9 |
| SOKOTO | 0 | 0 | 58.8 | 34.8 | 19.4 | 190.9 | 24.6 |
| UMUAHIA | 29 | 1 | 48.3 | 32.8 | 23.2 | 200.1 | 19.9 |
| UYO | 0 | 0 | 53 | 34.6 | 23.4 | 209.9 | 21.5 |
| WARRI | 4.8 | 1 | 48.1 | 33.9 | 24.9 | 214 | 19.4 |
| YELWA | 0 | 0 | 68 | 37.9 | 18.5 | 201.8 | 27.9 |
| YOLA | 0 | 0 | 61.2 | 36.5 | 21.2 | 208.4 | 24.8 |
| ZARIA | 0 | 0 | 56 | 31.9 | 16.8 | 163.3 | 24.6 |
| OBUDU | - | - | - | - | - | - | - |
| IBI | - | - | - | - | - | - | - |
| ADO-EKITI | 39.3 | 2 | 53 | 32.7 | 20.4 | 185.7 | 22.4 |
| USI-EKITI | 0 | 0 | 63.7 | 33.9 | 14.3 | 160.8 | 28.2 |
| CALARMA | - | - | - | - | - | - | - |

Note: RAINFALL (mm)
 PET(mm/day)
 TMAX (°C)
 TMIN (°C)
 GDD (day)
 RAD (MJ/m²/day)

Dear All,

Comments and suggestions on how to improve this publication are welcome. Agrometeorologists, Agriculturists, Extension Workers, Research Officers, Users and the General Public should 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