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SUMMARY

The dekad under review showed that the position of Inter Tropical Discontinuity (ITD) remained above the country and rainfall activities had extended to most parts of the Northern states. Normal to above-normal rainfall was recorded in the North except Gusau Yelwa and Potiskum, the central states recorded below-normal rainfall. Normal to above rainfall was also recorded over the South. Maximum temperature values still remained high especially in Maiduguri. The highest rainfall amount was recorded at Calabar with 293.2mm in 9 rain days, followed by Ibadan with 285mm in 4 rain-days and Eket with 277.9mm in 8 rain-day. Harvest of New yam and corn/maize continued in the central and southern states, while in the extreme North planting of Sorghum is the major activity during the dekad and is expected to continue.

1.0 RAINFALL PARTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

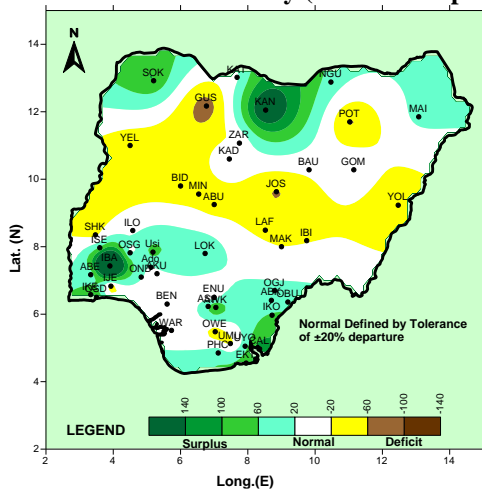


Fig.1: 1ST DEKAD JULY RAINFALL ANOMALIES

Rainfall anomaly over the country as shown in Fig.1 above shows that the extreme north recorded surplus except Gusau and Potiskum that had deficit; Deficit to normal rainfall was recorded over the north-central, the south-west and the south-east had normal to surplus rainfall anomalies.

1.2 Rainfall Amounts

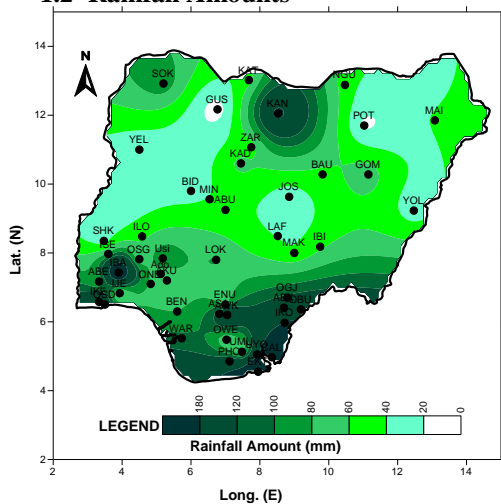
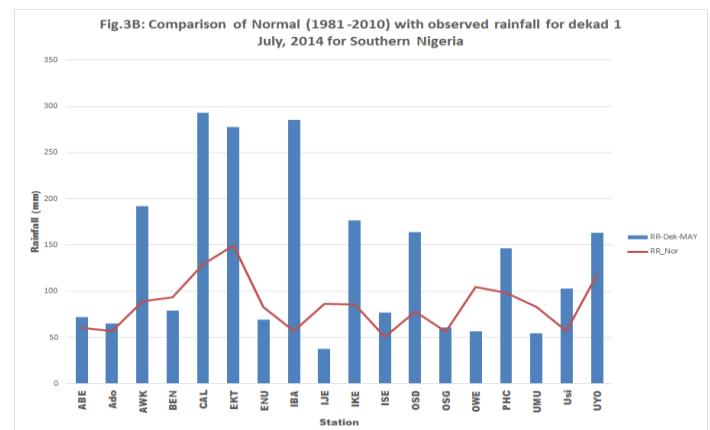
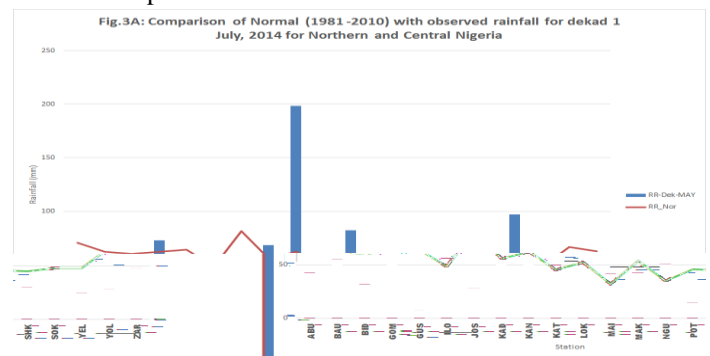


Fig.2 above shows the actual observed rainfall amount measured over the country for the dekad. Stations across the country recorded good rainfall except Gusau.

The highest rainfall amount was recorded at Calabar with 293.2mm in 9 rain days, followed by Ibadan with 285mm in 4 rain-days and Eket with 277.9mm in 8 rain-day. These stations with high values should monitor their farmlands to avoid possible flooding.

1.3 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE DEKAD

The comparison of the actual rainfall amounts measured and normal during the dekad over the northern and southern parts of the country is shown below in Fig.3A and Fig.3B respectively. Below normal condition was experienced over in the North except Kano and Sokoto that recorded above normal rainfall (Fig.3A). Most stations in the South in Fig.3B recorded above normal rainfall except Owerri that had below normal.



1.4 Number of Rain Days.

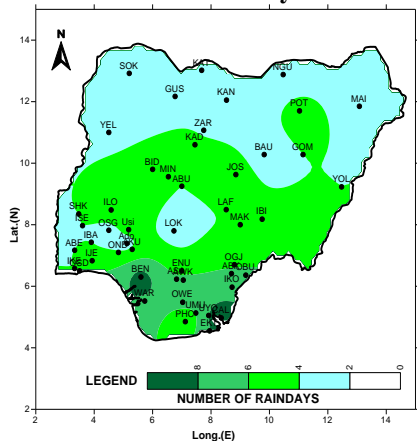


Fig.4: NUMBER OF RAIN DAYS

The Fig. 4 above is the distribution of rainfall across the country and it shows that most stations in the country recorded at least 2 rain-days while few stations in the South recorded as high as 7 to 9 rain-days. The distribution was adequate and good for rain-fed agriculture and it favoured crops growth and development in the country.

2.0 SOIL MOISTURE CONDITION

Fig. 5 below shows the soil moisture indices across the country and indicates that the country was under normal to surplus soil moisture conditions with exception of Gusau, Yelwa and Potiskum that is experiencing deficit soil moisture. The South and central states had normal to surplus soil moisture conditions.

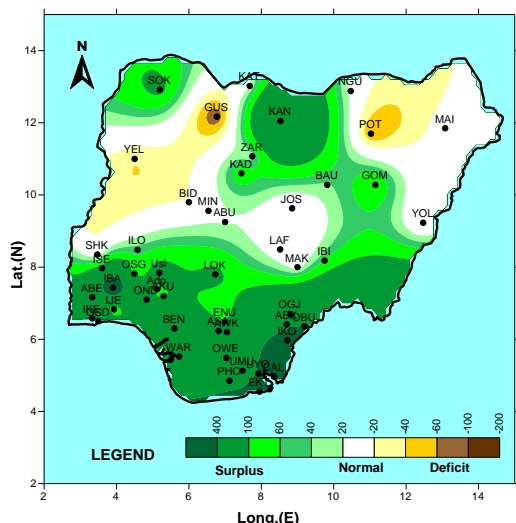


Fig.5: 1ST DEKAD OF JULY SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

Fig.6 below shows the maximum temperature anomaly across the country. It indicates that the western flank (Sokoto to Abeokuta), Jos and Maiduguri recording warmer than normal maximum temperature. Ekiti and

Eket recorded colder than normal maximum Temperature anomalies.

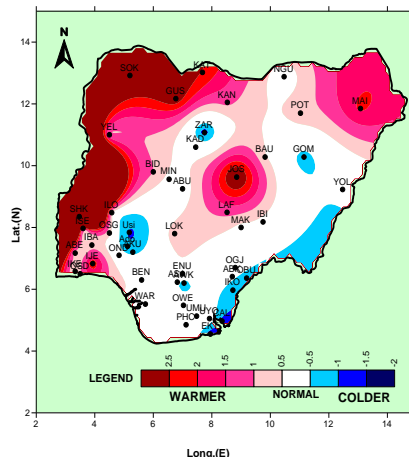


Fig.6: Maximum Temperature Anomaly.

3.2 Maximum Temperature Values.

The actual mean maximum temperature distribution across the country is shown in Fig.7 below and it reveals that the extreme North of the country recorded maximum temperatures in the range of 32°C to 36°C. Most stations in the South and central states recorded 31°C and below.

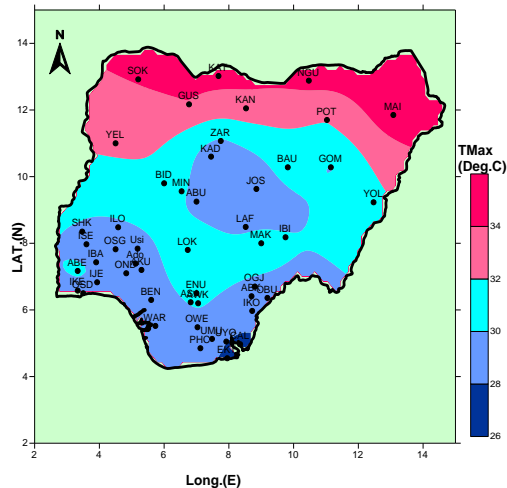


Fig. 7: Mean maximum Temperature Nigeria

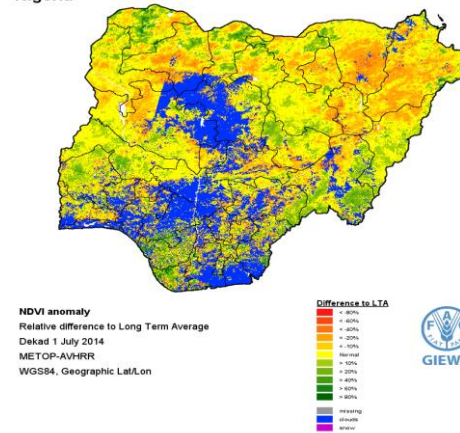


Fig.8 1ST DEKAD OF JULY Normalized Differential Vegetative Index (NDVI).

WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 2 (11 TO 20), OF JULY 2014

4.1 Weather Outlook

The position of Inter Tropical Discontinuity (ITD) is expected to oscillate between latitudes 19deg. N and 21degN. This feature is expected to place the northern part of the country under Cloudy weather conditions. The central part is expected to be cloudy with thunderstorm/rains. The inland and coastal areas are expected to be cloudy with rains/thunderstorms.

The mean maximum temperature in the North and the central will range from 25 °C to 31 °C, while the mean minimum temperature will be between 17 °C and 24 °C. In the inland and coastal areas, the mean maximum

temperatures are expected to lie between 26 °C and 28 °C, while the mean minimum temperature will range from 21 °C to 24 °C.

4.2 Agricultural Activity/Outlook

Harvesting of New yam, sweet corn and fresh vegetables will be the main activity in the South. In the North, farmers will engage in earthen, fertilizer application and sowing of Sorghum. Farmers are advised to use the NiMet's 2014 Seasonal Rainfall Prediction (SRP) for good agricultural planning and increased yields and other relevant publications like the Drought and Flood Monitor bulletin.

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

| STATION | RAINFALL | RAINDAY | PET | TMAX | TMIN | GDD | RAD |
|-----------|----------|---------|------|------|------|-------|------|
| ABEOK | 72.5 | 4 | 35.6 | 30.5 | 23.7 | 190.6 | 14.9 |
| ABUJA | 42.4 | 4 | 36.3 | 29.4 | 21.8 | 176.3 | 15.6 |
| AKURE | - | - | - | - | - | - | - |
| ASAB | - | - | - | - | - | - | - |
| AWKA | 192.3 | 7 | 42.4 | 30.2 | 21.6 | 179.1 | 18.1 |
| BAUCHI | 54.9 | 3 | 40.1 | 31.2 | 22.2 | 187.1 | 16.9 |
| BENIN | 79.4 | 9 | 32.1 | 29.4 | 23.7 | 185.3 | 13.6 |
| BIDA | 31.9 | 5 | 39.3 | 31.6 | 23.4 | 194.9 | 16.3 |
| CALABAR | 293.2 | 9 | 29.5 | 27.4 | 22.2 | 168.4 | 12.8 |
| EKET | 277.9 | 8 | 36.3 | 27.3 | 19.3 | 152.7 | 16.3 |
| ENUGU | 69.3 | 5 | 40.7 | 30.2 | 20.7 | 174.5 | 17.6 |
| GOMBE | 72.6 | 4 | 36.9 | 29.9 | 22 | 179.3 | 15.7 |
| GUSAU | 7.2 | 2 | 44.7 | 33.9 | 23.4 | 206.6 | 18.2 |
| IBADAN | 285 | 4 | 35.1 | 29.5 | 22.6 | 180.4 | 15 |
| IJEBU | 37.9 | 5 | 34.1 | 29.7 | 23.3 | 184.6 | 14.4 |
| IKEJA | 176.8 | 4 | 32 | 28.8 | 22.9 | 178.9 | 14.6 |
| IKOM | - | - | - | - | - | - | - |
| ILORIN | 56.4 | 6 | 37.9 | 29.7 | 21.6 | 176.5 | 16.3 |
| ISEYIN | 77.2 | 4 | 35.6 | 28.8 | 21.4 | 170.8 | 15.5 |
| JOS | 27.9 | 5 | 34.8 | 27.9 | 24.7 | 125.5 | 16.5 |
| KADUNA | 68.6 | 6 | 36.5 | 29 | 20.9 | 169.7 | 36.5 |
| KANO | 198.4 | 3 | 43.1 | 33.2 | 23.4 | 203.3 | 17.6 |
| KATSINA | 50 | 3 | 44.8 | 34.6 | 24.3 | 214.9 | 17.9 |
| LAFIA | - | - | - | - | - | - | - |
| LOKOJA | 82.4 | 3 | 37.7 | 31.3 | 23.9 | 196.2 | 15.6 |
| MAIDU | 41.9 | 3 | 45.2 | 35.3 | 25 | 221.1 | 17.9 |
| MAKURDI | 42.6 | 4 | 41 | 30.6 | 21.1 | 178.6 | 17.5 |
| MINNA | - | - | - | - | - | - | - |
| NGURU | 50.7 | 2 | 45.2 | 34.6 | 24 | 212.8 | 18.2 |
| OGOJA | - | - | - | - | - | - | - |
| ONDO | - | - | - | - | - | - | - |
| OSHODI | 163.7 | 6 | 31.8 | 29.1 | 23.4 | 182.7 | 13.5 |
| OSOGBO | 60.8 | 3 | 35.1 | 28.9 | 21.9 | 173.8 | 15.1 |
| OWERRI | 56.8 | 7 | 34.7 | 29.3 | 22.6 | 179.7 | 14.8 |
| PHC | 146.7 | 4 | 35 | 29.5 | 22.7 | 181.1 | 14.9 |
| POT | 14.4 | 5 | 40.3 | 32.1 | 23 | 195.4 | 16.7 |
| SHAKI | 29.7 | 4 | 30.1 | 29.7 | 21.5 | 175.8 | 16.4 |
| SOKOTO | - | - | - | - | - | - | - |
| UMUAHIA | 54.6 | 6 | 35.2 | 29.7 | 23 | 183.8 | 14.9 |
| UYO | 163 | 8 | 29.6 | 28.1 | 23.2 | 176.6 | 12.7 |
| WARRI | - | - | - | - | - | - | - |
| YELWA | 24.5 | 3 | 40.1 | 32.4 | 23.9 | 201.6 | 16.5 |
| YOLA | 28 | 4 | 36.7 | 31.5 | 24.3 | 199.4 | 15.1 |
| ZARIA | 47.8 | 3 | 38.2 | 29.8 | 21.2 | 174.9 | 16.4 |
| OBUDU | - | - | - | - | - | - | - |
| IBI | - | - | - | - | - | - | - |
| ADO-EKITI | 65.1 | 6 | 34.6 | 28.6 | 21.7 | 171.4 | 15 |
| USI-EKITI | 103.1 | 6 | 41.9 | 29.3 | 18.5 | 158.9 | 18.6 |
| 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:

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