

# NIGERIAN METEOROLOGICAL AGENCY 33 POPE JOHN PAUL II STREET, MAITAMA DISTRICT, P.M.B. 615, GARKI, ABUJA, NIGERIA

Agrometeorological Bulletin No.29, Dekad 2, October (11 – 20) 2011

# **SUMMARY**

During the second ten days of October 2011, moderate to heavy rains were recorded in most parts of the south and the north central with reports of flood and erosion. Normal to surplus rainfall anomaly prevailed over most parts of the country while parts of the extreme north and the south-south had deficits. Also most parts of the country had normal to surplus soil moisture conditions except the extreme north and some parts of the north central that experienced moisture deficits. Warmer than normal temperatures persisted in the extreme north including stations at Sokoto, Katsina, Gusau, Kano, Nguru, Potiskum and Maiduguri whereas Jos and Eket remained colder than normal. Temperatures above 32 Deg C were reported in the extreme north while in the south and some parts of the north central recorded below 32 Deg C. However, Jos, Shaki and Ondo experienced temperatures below 30Deg C. Harvest of maize, cassava, fruity vegetables and yams remained the dominant field activity in the south while in the north, harvest of cereal crops such as millet, maize and sorghum is expected to continue during the dekad. 1.0 RAINFALL TREND

# 1.1 Rainfall Anomaly



FIG. 1: 2nd DEKAD OF OCTOBER 2011 RAINFALL ANOMALIES (%) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO THE 1971 - 2000 BASE PERIOD DECADAL MEAN S.

*Fig 1* above shows the rainfall anomaly over the country and indicates that most parts of the country had normal to surplus rainfall anomaly while parts of the extreme north and some parts of the southsouth (red patches) had deficits.

# **1.2 Rainfall Amounts**



Fig 2 shows the actual rainfall received across the country and reveals that the extreme north had between zero and 40mm while the rest of the country had higher.

However, the cessation of rainfall has set in most parts of the extreme north while the north central and the south had enough rainfall to sustain optimal crop growth and development.

#### 1.3 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE DEKAD

*Figs 3A & B* below are the comparison of the actual rainfall amount with normal rainfall values in some selected stations across the country. Fig 3A shows that most stations in the north which had rains were higher than normal while most stations in the south (Fig 3B) also had above normal rainfall.



#### **1.4 Number of Rain Days**

The number of rain days across the country is shown in Fig 4 and reveals that most parts of the extreme north had less than 4 days of rainfall while elsewhere had above. However the rainfall distribution in the south and most parts of the north central was favourable for crop development and supported crops that required high spread of rains.



FIG. 4: A CTUAL NUMBER OF RAIN DAYS FOR DEKAD 2, OCTOBER 2011

### 2.0 SOIL MOISTURE CONDITION



FIG. 5: 2nd DEKAD OF OCTOBER 2011 SOIL MOISTURE INDICES (% OVER THE COUNTRY.

*Fig* **5** shows the decadal distribution of soil moisture across the country and indicates that most parts of the country had normal to surplus soil moisture conditions except the extreme north and some parts of the north central that recorded deficits. The available soil moisture in the south and some parts of the north central supported crop growth and development and harvest of root crops.

#### **3.0 MAXIMUM TEMPERATURE TREND 3.1 Maximum Temperature Anomaly**

The trend of maximum temperature anomaly is shown in  $Fig \ 6$  below and indicates that most parts of the country had normal temperatures. However, warmer than normal temperatures have persisted along the extreme north (Sokoto, Katsina, Gusau, Kano, Nguru, Potiskum and Maiduguri) while Jos and Eket were colder than normal.



#### **3.2 Maximum Temperature Values**

Fig 7 shows the actual mean maximum temperature distribution across the country and reveals that the extreme north experienced hot temperatures (above 32 Deg C) while the south and some parts of the north central recorded mild to warm temperatures (below 32 Deg C). However Jos, Shaki and Ondo had cooled to mild temperatures (below 30Deg C). Generally, temperatures favoured crop development and growth and as well as livestock performance. It also aided drying of farm produce.



FIG. 7: MEAN MAXIMUM TEMPERATURE FOR DERAD 2, OCTOBER 2011

#### 4.0 WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 3 (21 TO 31), OF OCTOBER 2011 4.1 Weather Outlook

The moist south westerly winds are expected to dominate the central and southern parts of the country, as the Inter Tropical Discontinuity (ITD) continued its southward movement which will fluctuate between Latitude 12.5.0 *deg. and 13.5 deg. north*.

The weather condition in the North is expected to be sunny with isolated dust haze while in the Central states it is expected to be partly to cloudy with occasional rains.

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In the Inland and Coastal states, the weather is expected to be cloudy with localized thunderstorms activities.

In the northern parts of the country, the maximum temperatures are expected to be between 34 and 36 deg. C while the minimum temperatures will range from 23 to 24 deg. C.

In the Inland and the coastal states, the maximum temperatures are expected to range between *32 and 33 deg. C* while the minimum temperatures will be between *22 and 24 deg. C*.

The predicted amount of rainfall is expected to range from 0 - 40mm in the north while elsewhere will be from 20 to 100mm.

## 4.2 Agricultural Activity/Outlook

In the north, harvest of cereal crops such as millet, maize and sorghum in the northern part of the country is expected to continue while in the south crops such as cassava, yams, and vegetables are in various maturity stages and are also being harvested.

#### TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

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#### 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,

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