



**NIGERIAN METEOROLOGICAL AGENCY**  
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**SUMMARY**

*During the period under review, moderate to heavy rains were recorded across the country with flood and erosion in most parts of the south. Most parts of the country had normal to surplus rainfall anomaly while the north east, parts of the north central and southsouth had deficit. Normal to surplus soil moisture conditions were observed in most parts of the country except parts of the northeast and areas in and around Sokoto, Katsina, Minna and Lokoja which recorded deficits. Warmer than normal temperatures have persisted in and around Sokoto, Katsina, Kano, Nguru, and Maiduguri while areas around Shaki, Jos and Eket were colder. Temperatures below 32 Deg C were recorded in most parts of the country except Sokoto, Gusau, Katsina, Kano, Nguru, Potiskum and Maiduguri which recorded temperatures above 32 Deg 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**

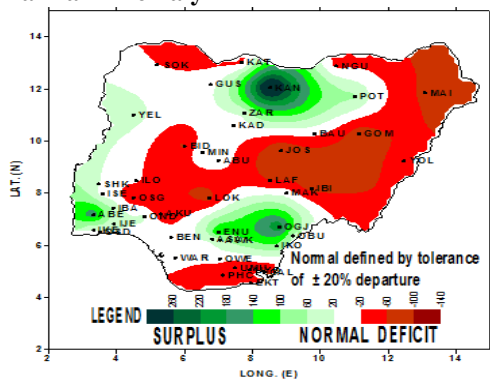


FIG. 1: 3rd DEKAD OF SEPTEMBER 2011 RAINFALL ANOMALIES (%) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO THE 1971 - 2000 BASE PERIOD DEKADAL MEANS

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 the northeast, parts of the north central and southsouth (red patches) had deficit.

**1.2 Rainfall Amounts**

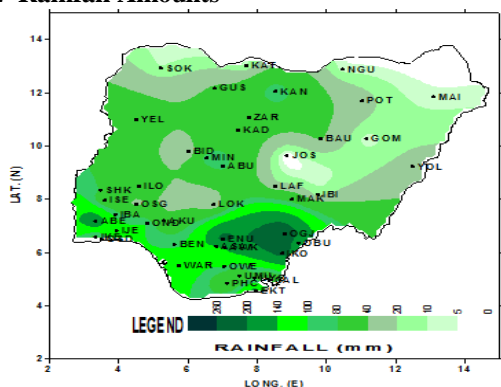


FIG. 2: ACTUAL RAINFALL AMOUNT FOR DEKAD 3, SEPTEMBER 2011

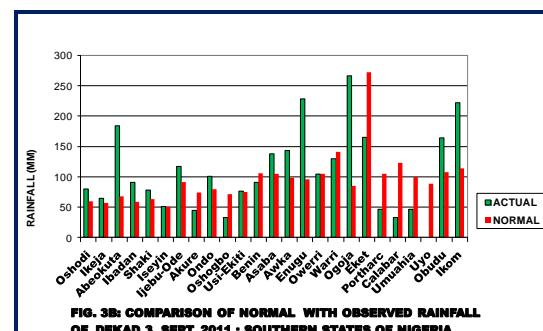
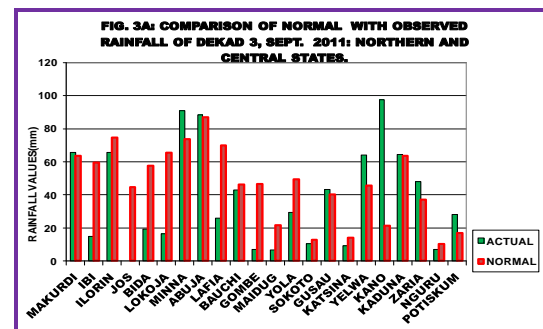
Fig 2 shows the actual rainfall received across the country and reveals that most stations had above 40mm

except areas in and around Sokoto, Katsina, Potiskum, Maiduguri, Bauchi, Gombe, Jos, Yola and Lafia which had lower.

Generally rainfall was enough 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 south and the north of the country. Fig 3A shows that most stations in the north were lower than normal while most stations in the south had above normal rainfall (Fig 3B).



### 1.4 Number of Rain Days

The number of rain days across the country is shown in **Fig 4** and reveals that the south and some parts of the north central (green areas) had over 4 days of rainfall while the extreme north and some parts of the north central had lower. The rainfall distribution in the south was favourable for crop development and supported crops that required high spread of rains.

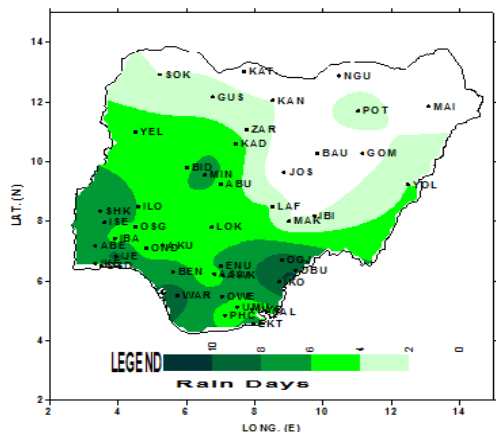


FIG. 4: ACTUAL NUMBER OF RAIN DAYS FOR DEKAD 3, SEPTEMBER 2011

## 2.0 SOIL MOISTURE CONDITION

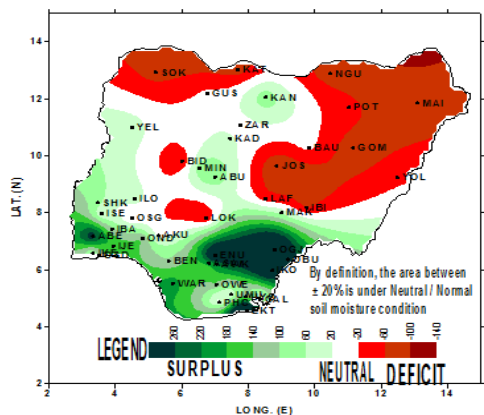


FIG. 5: 1st DEKAD OF SEPTEMBER 2011 SOIL MOISTURE INDICES (%) OVER THE COUNTRY.

**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 northeast as well as areas in and around Sokoto, Katsina, Minna and Lokoja which recorded deficits. Generally the soil moisture across the country supported crop growth and development.

## 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 were normal. However, warmer than normal temperatures have persisted in areas such as Sokoto, Katsina, Kano, Nguru, and Maiduguri while areas in and around Shaki, Jos and Eket were colder.

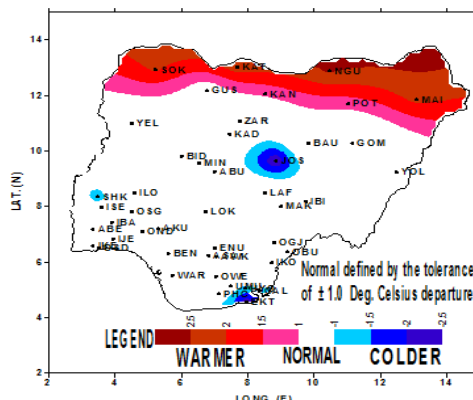


FIG. 6: 3rd DEKAD OF SEPTEMBER 2011 MEAN MAXIMUM TEMPERATURE ANOMALIES (Deg. C) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO THE 1971 - 2000 BASE PERIOD DECADEAL MEANS.

### 3.2 Maximum Temperature Values

**Fig 7** shows the actual mean maximum temperature distribution across the country and reveals that most stations across the country recorded temperatures below **32 Deg C** while the extreme north including Sokoto, Gusau, Katsina, Kano, Nguru, Potiskum and Maiduguri recorded temperatures above **32 Deg C**. However Jos and Shaki had temperatures below **30 Deg C**. Generally temperatures during the dekad favoured crop development and growth and as well as livestock performance.

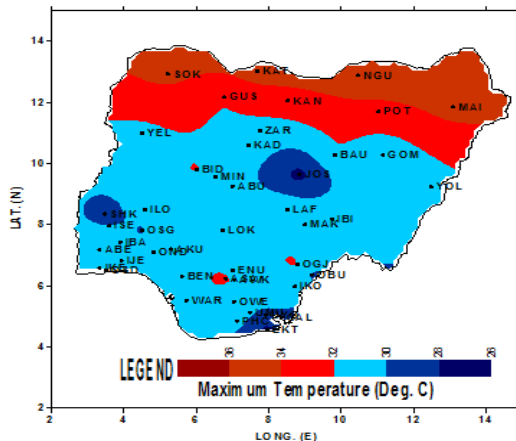


FIG. 7: MEAN MAXIMUM TEMPERATURE FOR DEKAD 3, SEPTEMBER 2011

## 4.0 WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 1 (1 TO 10), OF OCTOBER 2011

### 4.1 Weather Outlook

The moist south westerly winds are expected to continue to dominate the country. The Inter Tropical Discontinuity (ITD) continued its southward movement, fluctuating between Latitude **14.0 deg. and 15.0 deg. north**.

The Northern parts of the country are expected to experience cloudy weather condition while the north central is expected to be cloudy with localized thundery activities. The inland parts of the country are expected to be cloudy with localized thundery activities while the coastal areas are expected to be cloudy with localized rain during the period.

Maximum temperatures for the north and central states are expected to range between  $30^{\circ}\text{C}$  and  $33^{\circ}\text{C}$  while minimum temperatures will be from  $20^{\circ}\text{C}$  to  $24^{\circ}\text{C}$ . Maximum temperatures for the inland and coastal states are expected to range between  $29^{\circ}$  and  $32^{\circ}\text{C}$  while the

minimum temperatures will be from  $22^{\circ}\text{C}$  to  $23^{\circ}\text{C}$  during the period.

Rainfall is expected to spread across the country with amounts ranging from 20mm to 300mm.

#### 4.2 Agricultural Activity/Outlook

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

**TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD**

STATION	RAINFALL(mm)	RAINDAY	PE(mm)	TMAX(Deg C)	TMIN(Deg C)	Degree Days	RADIATION (MJ/m <sup>2</sup> /day)
ABEOKUTA	184	8	45.3	31.4	22.7	190.4	19
ABUJA	88.4	5	44.5	30.5	21.6	180.6	18.9
AKURE	44.3	5	43.9	30.6	22.2	183.6	18.6
ASABA	137.7	4	48.1	32.5	22.9	197.3	19.9
AWKA	143.7	6	44.7	31.4	22.9	191.2	18.7
BAUCHI	42.9	1	47.1	31.9	22.3	191.2	19.7
BENIN	91.3	7	44.9	31.3	22.8	190.5	18.8
BIDA	19.1	5	47.2	32.1	22.5	193.1	19.7
CALABAR	33.2	5	35.5	29.6	24.2	189.3	14.9
EKET	164.7	7	26.4	27.4	24.2	177.7	11.3
ENUGU	228.1	7	46.8	31.0	21.3	181.5	19.9
GOMBE	6.8	1	43.4	30.6	22.2	184	18.4
GUSAU	43.3	3	48.1	32.1	21.9	189.7	20.1
IBADAN	90.8	5	43.5	30.7	22.5	186.2	18.4
IJEBU ODE	117.3	9	43	30.9	23.0	189.4	18
IKEJA	64.6	7	41.8	31.0	23.6	193.4	17.4
IKOM	222	10	46.1	31.2	22.0	186	19.5
ILORIN	65.8	6	45.5	30.7	21.5	180.6	19.4
ISEYIN	51.4	7	43.3	30.0	21.6	177.7	18.5
JOS	0	0	44.5	27.2	16.9	140.8	20.4
KADUNA	64.4	5	49.8	31.4	20.2	178.1	21.3
KANO	97.5	2	51.3	33.1	21.7	193.5	21.3
KATSINA	9	1	56.6	35.1	21.5	202.9	23.2
LAFIA	25.9	4	43.9	31.7	23.4	195.5	18.2
LOKOJA	16.5	4	43.1	31.7	23.9	198.1	17.8
MAIDUGURI	6.7	1	52.9	34.8	23.4	211.1	21.4
MAKURDI	65.8	2	44.9	31.1	22.3	186.6	18.9
MINNA	90.9	8	49.2	31.2	20.3	177.3	21.1
NGURU	7	1	53.6	35.5	24.0	217.4	21.4
OGOJA	266.6	9	48.2	32.1	22.2	191.3	20.1
ONDO	100.9	5	41.8	30.3	22.6	184.6	17.7
OSHODI	79.8	5	39.5	30.9	24.4	196.9	16.4
OSOGBO	32.8	6	42.3	29.9	21.9	179.3	18.1
OWERRI	104.4	7	43.3	30.5	22.4	184.3	18.3
PHC	46.2	5	42.7	30.9	23.1	190	17.9
POTISKUM	28.2	3	50.6	33.3	22.4	198.6	20.9
SHAKI	78.6	7	43.4	29.4	20.6	169.8	18.9
SOKOTO	10.3	2	52.8	34.7	23.2	209.2	21.4
UMUAHIA	46.1	5	40.9	30.3	23.0	186.2	17.2
UYO	-	-	-	-	-	-	-
WARRI	130.1	9	43.1	31.6	23.8	196.8	17.9
YELWA	64.2	5	44.4	31.5	23.0	192.2	18.5
YOLA	29.4	4	41.5	31.1	23.5	193.1	17.3
ZARIA	47.9	3	48.7	31.4	20.6	179.9	20.8
OBUDU	164.2	10	42.2	29.8	21.9	178.3	18
IBI	14.9	2	44.2	31.1	22.7	188.9	18.5
USI-EKITI	76.4	6	-	-	-	-	-

**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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