



**NIGERIAN METEOROLOGICAL AGENCY**  
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**Agrometeorological Bulletin No.10, Dekad 1, April (1 – 10) 2011**

**SUMMARY**

During the 1<sup>st</sup> dekad of April 2011, surplus rainfall anomalies were observed in most parts of the south with few areas recording deficits. Light to moderate rains were recorded across the south with Calabar recording the highest amount of 124.7mm followed by Benin with 90.7mm. Colder than normal temperatures were experienced in and around Jos and parts of the Niger Delta area while Sokoto, Yelwa, Bida, Maiduguri, Lafia, Sokoto and Yola were warmer than normal. Temperatures below 32 deg C were recorded in and around Eket and Calabar while the rest of the country had above 32 Deg C. However, unlike last dekad, only two stations (Yelwa and Yola) recorded temperatures above 40 Deg C indicating a slight reduction in temperatures. With light to moderate rains in most parts of the south during the past month, some farmers have continued to clear their farmlands for seed bed preparations while others began planting. Farmers in the southern parts of the country are advised to adhere to 2011 NIMET's Seasonal Rainfall Prediction (SRP) for planting dates. The farmers in the northern parts are still required to continue to irrigate their farm land pending the time of rainfed cropping season.

**1.0 RAINFALL TREND**

**1.1 Rainfall Anomaly**

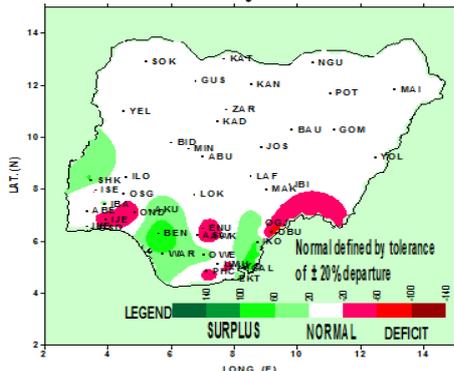


FIG. 1: 1<sup>st</sup> DEKAD OF APRIL 2011 RAINFALL ANOMALIES (%) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO THE 1971 - 2000 BASE PERIOD DECADEAL MEANS.

The rainfall anomaly during the dekad is shown in *fig 1* above and indicates that most parts of the south (green areas) had surplus rainfall anomalies while deficits were recorded in parts of Ijebu Ode, Ondo, Obudu, P.H, Uyo and environs. Greater part of the country (in white) remained normal.

**1.2 Rainfall Amounts**

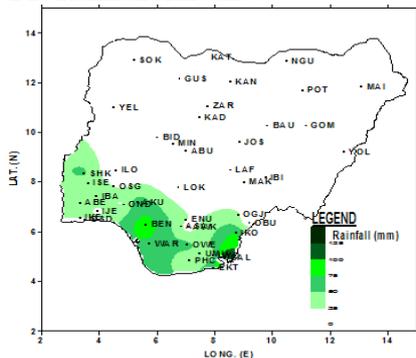


FIG. 2: ACTUAL RAINFALL AMOUNT FOR DEKAD 1, APRIL 2011

Most parts of the south in green as shown in *fig 2* received light to moderate rains while the northern parts of the country (in white) had below 10mm of rainfall. Farmers especially those in the north are advised to continue to irrigate their crops as rains are still inadequate.

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

The comparison of the actual rainfall amount with normal rainfall values in some selected stations across the south is shown in *Fig 3* below and reveals that most stations across the south received rainfall amounts the below normal.

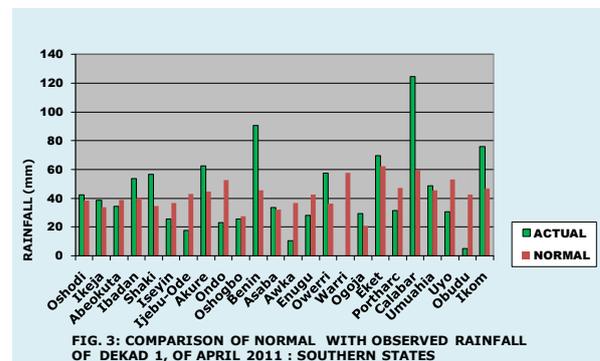


FIG. 3: COMPARISON OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 1, OF APRIL 2011 : SOUTHERN STATES

**1.4 Number of Rain Days**

The number of rain days across the country is shown in *fig 4* and indicates that most stations in the south had 2- 4 raindays while the greater part of the country in white had zero to 2 days of rainfall.

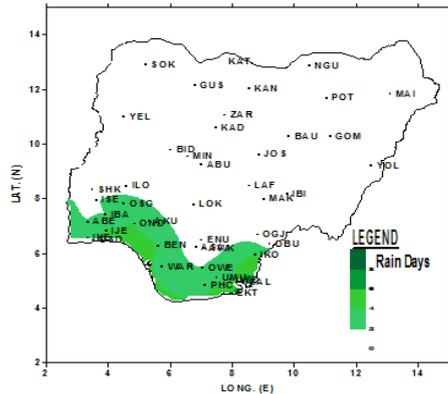


FIG. 4: ACTUAL NUMBER OF RAIN DAYS FOR DEKAD 1, APRIL 2011

## 2.0 SOIL MOISTURE CONDITION

Fig 5 shows the decadal distribution of soil moisture across the country and reveals that most parts of the country had deficit soil moisture condition. Surpluses however were recorded in parts of the Akure and Niger Delta area (Benin, Warri, Calabar, Eket and Ikom). Farmers in the southern parts of the Niger delta and the coastal areas are advised to commence planting while the other parts of the south should commence bush clearing and seed bed preparation.

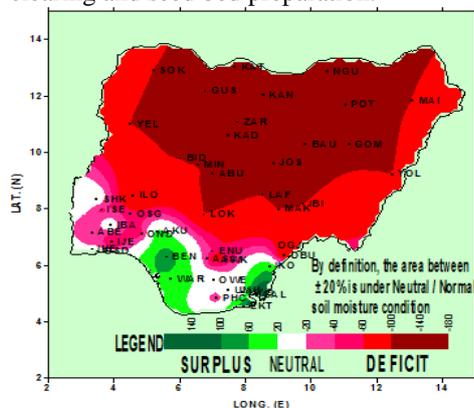


FIG. 5: 1st DEKAD OF APRIL 2011 SOIL MOISTURE INDICES (%) OVER THE COUNTRY.

## 3.0 MAXIMUM TEMPERATURE TREND

### 3.1 Maximum Temperature Anomaly

The maximum temperature anomaly over the country is shown in fig 6 and indicates that areas in and around Jos and parts of the Niger Delta area recorded colder than normal temperatures while Sokoto, Yelwa, Bida, Maiduguri, Lafia, Sokoto and Yola had warmer than normal. The white areas were normal with no significant change when compared with the normal temperatures.

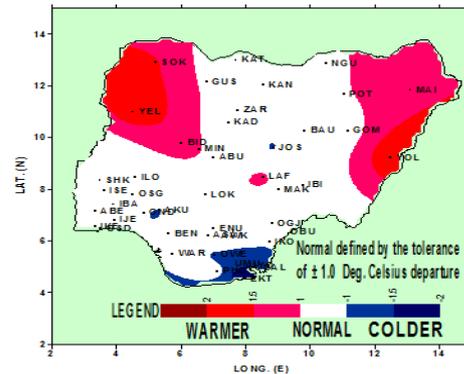


FIG. 6: 1st DEKAD OF APRIL 2011 MEAN MAXIMUM TEMPERATURE ANOMALIES (Deg. C) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO THE 1971 - 2000 BASE PERIOD DECADEAL MEANS.

### 3.2 Maximum Temperature Values

The actual mean maximum temperature distribution is shown in Fig 7 below and reveals that parts of Eket and Calabar recorded less than 32 Deg C while other parts of the country had above 32 Deg C. However, unlike the last dekad, only two stations (Yelwa and Yola) recorded temperatures above 40 Deg C indicating a slight reduction in temperatures.

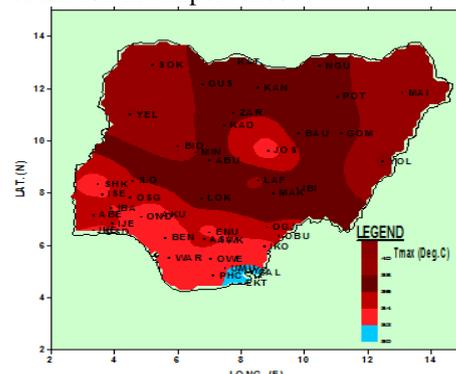


FIG. 7: MEAN MAXIMUM TEMPERATURE (Deg. C) FOR DEKAD 1, APRIL 2011

## 4.0 WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 2 (11 TO 20), OF APRIL 2011

### 4.1 Weather Outlook

The Inter Tropical Discontinuity (ITD)'s position is expected to oscillate between Latitude 10.5 deg. north and 11.5 deg. north during the dekad indicating slight northward movement. More inflow of moist southwesterly and active convective activities along the coast is expected.

The weather for the Northern parts of the country is expected to be sunny and dry while the central states are expected to experience partly cloudy to cloudy weather conditions. The Inland and Coastal areas will experience cloudy weather conditions with occasional rainfall.

Maximum temperatures for North and Central states are expected to range between **37 deg. C and 41 deg. C** while minimum temperatures will range from **24 deg. C to 28 deg. C**.

Maximum temperatures for Inland and Coastal parts of the country are expected to range between **33 deg. C and 35 deg. C** while the minimum temperatures will be between **23 deg. C and 25 deg. C** during the period.

#### 4.2 Agricultural Summary

As a result of the light to moderate rains recorded in most parts of the south during the dekad, planting of the staple food crops has commenced in some parts of the south.

In the north, farmers are advised to continue to irrigate their farm crops while the central areas are requested to engage in clearing of farm lands.

**TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD**

STATIONS	TOTAL RAINFAL (mm)	TOTAL RAIN DAYS	EVAPOTRANSPIRATION (mm)	MEAN MAXIMUM TEMP (°C)	MEAN MINIMUM TEMP (°C)	DEGREE DAYS (MAIZE)	MEAN RADIATION (MJ/m <sup>2</sup> /day)
ABEOKUTA	34.3	2	54.1	35.7	24.2	219.7	21.5
ABUJA	0	0	59.2	36.9	23.1	219.7	23.6
AKURE	62.3	3	48.4	32.7	22.8	197.5	20
ASABA	33.7	1	50.6	34.7	24.6	216.5	20.2
AWKA	10.5	1	51	34.5	24.1	213	20.5
BAUCHI	0	0	60.7	37.3	22.7	220.2	24.2
BENIN	90.7	4	47.8	33.3	24.0	206.4	19.4
BIDA	0	0	58	38.7	26.4	245.3	22.1
CALABAR	124.7	7	44.9	31.6	23.1	193.8	18.7
EKET	69.8	6	36	30.3	24.8	195.7	14.9
ENUGU	28.1	1	48.1	33.1	23.6	203.4	19.7
GOMBE	0	0	57.1	36.9	24.3	226.4	22.5
GUSAU	0	0	58.1	37.6	24.5	230.3	22.7
IBADAN	53.6	2	50.2	33.9	23.6	207.4	20.4
IJEBU ODE	17.7	4	50.2	34.3	24.2	212.1	20.2
IKEJA	38.7	4	45.5	33.6	25.4	214.7	18.3
IKOM	75.7	4	51	33.2	22.3	197.4	21.1
ILORIN	2.1	1	54.8	35.8	23.9	218.2	21.8
ISEYIN	25.7	2	51	33.8	23.1	204.4	20.8
JOS	0	0	55.3	32.3	17.9	170.6	24
KADUNA	0	0	59.4	36.4	22.0	211.	24
KANO	0	0	64	37.5	20.5	210.3	25.9
KATSINA	0	0	60.7	36.3	20.4	203.7	24.9
LAFIA	0	0	58.1	38.6	26.5	245.7	22.1
LOKOJA	0	0	55.4	37.5	26.2	238.7	21.3
MAIDUGURI	0	0	65.1	38.7	21.9	222.7	25.8
MAKURDI	0	0	55	36.9	25.6	232.5	21.4
MINNA	0	0	59.4	38.2	24.9	235.5	23
NGURU	0	0	61	37.6	22.7	221.5	24.2
OGOJA	29.2	1	56	35.8	23.6	217	22.4
ONDO	23	4	47.6	33.1	23.8	204.4	19.4
OSHODI	42.3	4	41.6	33.2	26.4	218.1	16.6
OSOGBO	25.6	3	54.4	34.9	23.0	209.5	22
OWERRI	57.4	2	48.2	32.6	22.8	196.9	19.9
PHC	31.6	3	51	33.6	22.9	202.7	20.8
POTISKUM	0	0	64.6	37.8	20.3	210.1	26.2
SHAKI	56.8	2	49.2	32.9	22.6	197.2	20.3
SOKOTO	0	0	61.7	39.3	24.9	240.7	23.7
UMUAHIA	48.6	4	46.4	32.1	23.0	195.3	19.2
UYO	30.6	3	43.9	31.8	23.8	198.1	18.1
WARRI	-	-	-	-	-	-	-
YELWA	0	0	63.6	40.1	25.1	246.2	24.2
YOLA	0	0	66.5	40.4	25.5	236.7	26
ZARIA	0	0	60.8	36.6	21.3	209.4	24.6
OBUDU	5	1	54.2	34.8	22.9	208.5	22

**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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