



**NIGERIAN METEOROLOGICAL AGENCY**  
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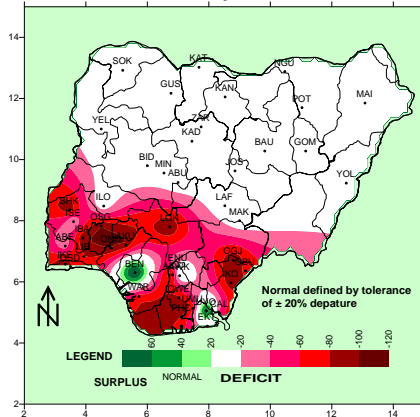
***Agrometeorological Bulletin No.7, Dekad 1, March (1 – 10) 2011***

**SUMMARY**

*During the dekad, some parts of the south received light to moderate rain with deficit anomalies in most areas. The rainfall amounts ranged from 3.9mm in Oshogbo to 46.9mm in Benin City. Colder than normal temperatures were experienced in and around Iseyin, Oshogbo, Jos and the Niger Delta area while Sokoto, Minna, Nguru, Maiduguri, Potiskum and Yola had warmer than normal. Temperatures above 32 deg C were recorded in all parts of the country except areas stations at Jos, Eket and Calabar which remained lower. With rains in most parts of the south in the last three decades, 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 advised to continue to irrigate their farm land as rainfed season is yet to commence.*

**1.0 RAINFALL TREND**

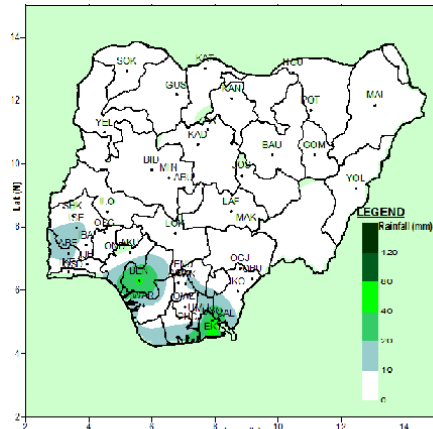
**1.1 Rainfall Anomaly**



**Fig-1: 1ST DEKAD OF MARCH 2011 RAINFALL ANOMALIES (%) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO THE 1971-2000 BASE PERIOD DEKADAL MEAN**

*Fig 1* above shows the rainfall anomaly during the dekad and indicates that most parts of the south (red areas) had deficit rainfall while Benin, Uyo and environs recorded surplus. The northern parts of the country (in white) were normal.

**1.2 Rainfall Amounts**

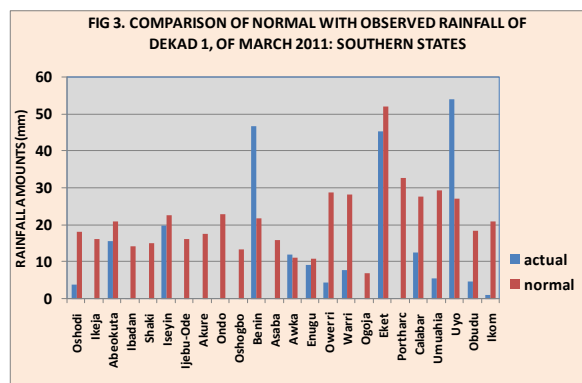


**FIG 2: ACTUAL RAINFALL AMOUNTS (mm) FOR DEKAD 1, MARCH 2011**

Most parts of the south (green areas) received light to moderate rains while the greater part of the country (in white) had below 10mm of rains as shown in *Fig 2* above. Farmers especially those in the north are advised to continue to irrigate their crops.

**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 indicates that most stations had lower than normal rainfall. The dekad is a complete departure when compared with the preceding dekad.



## 1.4 Number of Rain Days

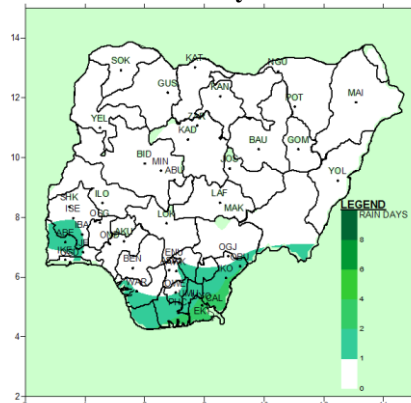


FIG 4: ACTUAL NUMBER OF RAIN DAYS FOR DEKAD 1, MARCH 2011

**Fig 4** shows the number of rain days across the country which indicates that most stations in the south had 2- 4days of rainfall while the greater part of the country in white had between zero and one rainy day.

## 2.0 Soil Moisture Condition

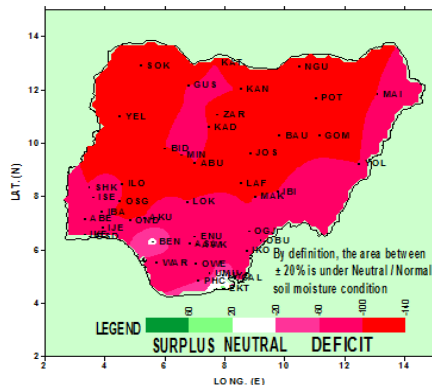


FIG. 5: 1st DEKAD OF MARCH 2011 SOIL MOISTURE INDICES (%) OVER THE COUNTRY.

The decadal distribution of soil moisture is shown in **Fig 5** above and indicates that most parts of the country had deficit soil moisture condition. Surpluses were recorded in parts of Eket and Uyo. 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.

## 3.0 MAXIMUM TEMPERATURE TREND

### 3.1 Maximum Temperature Anomaly

**Fig 6** shows the maximum temperature anomaly over the country and reveals that some parts of the Niger delta and areas in and around Iseyin, Oshogbo and Jos recorded colder than normal temperatures while Sokoto, Minna, Nguru, Maiduguri, Potiskum and Yola had warmer than normal. The white areas were normal with no significant change when compared with the normal temperatures.

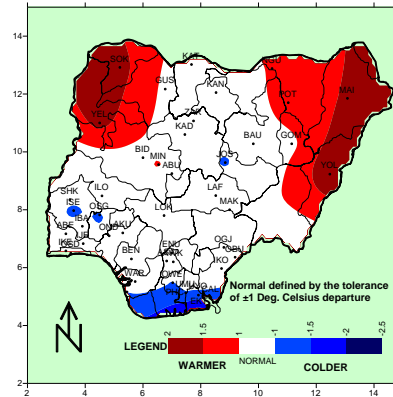


Fig 6: 1ST DEKAD OF MARCH 2011 MEAN MAXIMUM TEMPERATURE ANOMALIES (Deg.C) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO THE 1971-2000 BASE PERIOD DECADEAL MEAN

### 3.2 Maximum Temperature Values

The **Fig 7** above is the actual mean maximum temperature distribution and it reveals that most parts of the country (**red areas**) recorded above **32 Deg C** except places like Jos, Eket and Calabar which reported below **32 Deg C**.

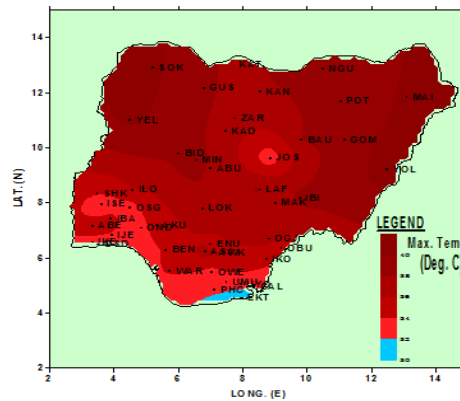


FIG. 7: MEAN MAXIMUM TEMPERATURE FOR DEKAD 1, MARCH 2011

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

### 4.1 Weather Outlook

The position of the Inter Tropical Discontinuity (ITD) is expected to remain quasi stationary between Latitude **10.5 deg. N and 11.5 deg. N**.

The Saharan high pressure cell is expected to maintain its position between 1028hpa and **1036hpa** while the St. Helena high pressure cell will oscillate between **1027hpa** and **1020hpa** during the dekad. The expected prevailing wind is south westerly.

The northern part of the country will experience sunny weather while the central states are expected to witness partly cloudy to cloudy weather conditions. Inland and coastal areas are will

experience cloudy weather conditions with localised rain/thunderly activities.

Maximum temperatures for north and central states are expected to range between **39 deg. C and 43 deg. C** while minimum temperatures are expected to range between **14 deg. C and 26 deg. C**. Maximum temperature for inland and coastal parts of the country are expected to range from **34 deg. C to 36 deg. C** while their minimum temperatures are expected to be between **25 deg. C to 27 deg. C** during the period. Predicted rainfall amounts are expected to range from 00.0mm (north) to 80.00mm (south).

#### 4.2 Agricultural Summary

During the dekad, light to moderate rains were received in most parts of the south prompting some farmers to commence bush clearing, seed bed preparation and planting. In the north, farmers continued to irrigate their farm crops. It is advisable that farmers in the south should follow the planting dates as stated in 2011 NIMET's SRP for better agricultural practices under rainfed system. Farmers in the north should still continue to irrigate their field crops as rainfed season is yet to commence.

**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	15.6	2	49.9	34.4	24.8	216	209.9
ABUJA	0	0	62.1	37.7	23.3	224.6	26.9
AKURE	0	0	52.3	34.4	23.6	210	27.2
ASABA	0	0	57.4	36.8	24.8	227.6	24.5
AWKA	12.1	1	55.1	36.3	25.2	227.3	21.2
BAUCHI	0	0	64.7	38.0	22.1	220.3	21.7
BENIN	46.9	1	49.3	34.1	24.8	214.1	25.8
BIDA	0	0	57.3	38.1	26.5	242.5	22.5
CALABAR	12.7	2	45.9	32.9	24.7	208.2	22.5
EKET	45.5	4	34.6	30.4	25.5	199.3	23.6
ENUGU	9.3	1	52.3	35.1	24.8	219.4	19.2
GOMBE	0	0	62.5	38.3	23.9	231.2	22.5
GUSAU	0	0	62.3	38.4	23.9	231.6	23.6
IBADAN	0.4	1	50.5	34.5	24.7	216.1	19.9
IJEBU ODE	-	-	-	-	-	-	20.8
IKEJA	0	0	45.4	33.8	26.1	219.4	20.8
IKOM	1.2	2	52.7	34.5	23.8	211.3	18.6
ILORIN	0	0	55.7	35.9	24.2	220.6	14.3
ISEYIN	19.8	1	48.2	32.8	23.4	200.6	20.8
JOS	0	0	59.6	32.6	16.1	163.9	20.8
KADUNA	0	0	63.9	37.2	21.2	212.1	25.8
KANO	0	0	66.5	37.8	20.2	209.9	26.9
KATSINA	0	0	66.5	37.6	19.4	205	27.2
LAFIA	0	0	59.5	38.3	25.8	240.3	22.9
LOKOJA	0	0	56.4	38.0	27.0	245.1	21.5
MAIDU	0	0	70	40.1	21.7	229.2	27.4
MAKURDI	0	0	51.6	35.9	26.2	230.7	20.2
MINNA	0	0	63.4	38.9	24.5	237.4	24.5
NGURU	0	0	65.5	38.8	22.4	226.2	25.8
OGOJA	0	0	59.8	37.1	24.0	225.7	23.6
ONDO	0	0	47.8	33.7	24.9	213.3	19.2
OSHODI	3.9	1	41.3	33.6	27.3	224.3	16.3
OSOGBO	0	0	48.6	33.1	23.6	203.5	19.9
OWERRI	4.4	1	50.6	33.3	23.1	201.9	20.8
PHC	-	-	-	-	-	-	-
POT	0	0	69.6	39.3	20.2	217.8	27.9
SHAKI	0	0	53.2	34.3	23.1	206.7	21.7
SOKOTO	0	0	65.2	40.4	25.3	248.4	24.7
UMUAHIA	5.5	1	49.1	33.4	24.0	206.9	20
UYO	54.1	3	47.3	33.0	24.2	205.8	19.3
WARRI	7.9	1	49.4	34.2	25.0	215.8	19.8
YELWA	0	0	66.1	40.4	25.1	247.3	25.1
YOLA	0	0	69.5	41.0	24.0	245	26.5
ZARIA	-	-	-	-	-	-	-
OBUDU	4.9	2	54.3	34.4	22.8	205.8	22.1
IBI	0	0	61.2	38.5	25.3	238.9	23.6

**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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