



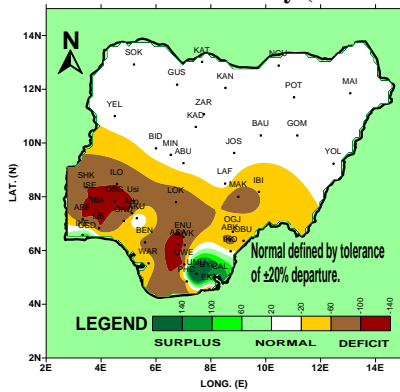
**Agrometeorological Bulletin No.4, Dekad 1, February (1 –10) 2014**  
 ISSN: 2315-9790

**SUMMARY**

*The first dekad of February was characterized by normal rainfall anomalies over northern-half on the country while the South had deficit-normal-surplus rainfall anomalies. The surplus rainfall anomaly concentrated within the South-south area. However, the country still remained under deficit soil moisture conditions as the rains were yet to establish. There were few stations in the South that reported rains, such as Calabar (46.8mm in 2 rain-day), Umuahia (29mm in 1 rain-day) and Oshodi (20mm in 1 rain-day). Land preparation for the rainy season/rain-fed agriculture has commenced in the South. Harvesting and packaging of vegetables and rice from the dry season farming is expected to continue in the northern and central parts of the country.*

**1.0 RAINFALL PARTERN**

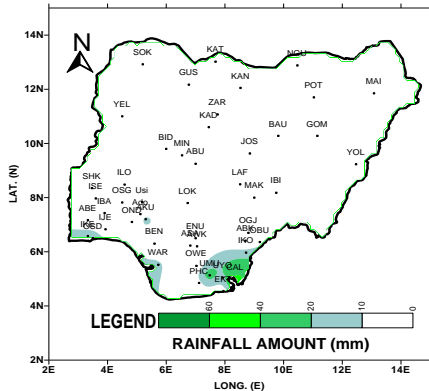
**1.1 Rainfall Anomaly (Deficit / Surplus)**



**Fig.1: 1ST DEKAD RAINFALL ANOMALIES**

Rainfall anomaly over the country as shown in *Fig.1* above reveals that the northern and central parts of the country remained normal, except parts of Lokoja, Makurdi and Ilorin which had deficit rainfall anomalies. The southern parts also had deficit anomalies except Lagos in the South west and in and around Calabar in the South-south which had surplus rainfall anomalies.

**1.2 Rainfall Amounts**

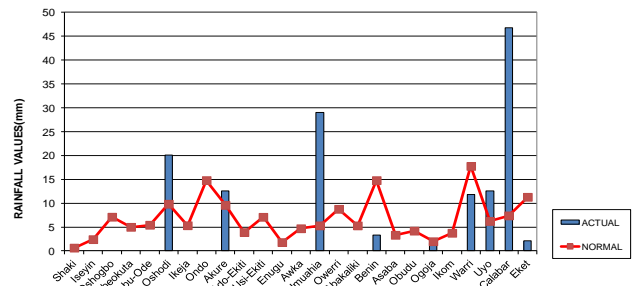


*Fig.2* above shows the observed actual rainfall amount measured over the country for the dekad. It indicates that few stations in the South recorded rains. The highest

rainfall was recorded in Calabar followed by Umuahia and Oshodi with their respective values as 46.8mm, 29mm and 20mm.

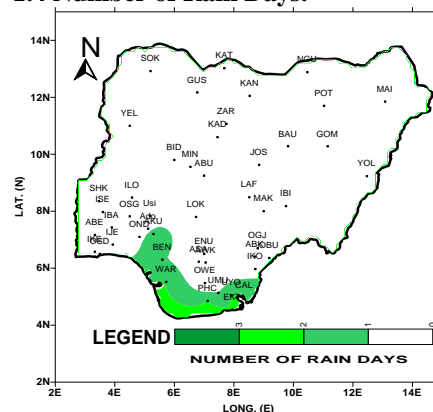
**1.3 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE DEKAD**

*Fig. 3* below is the comparison of the actual rainfall amounts measured and normal/long term averages during the dekad in the southern part of the country. It reveals that stations recorded below normal rainfall amounts, except Oshodi, Akure, Umuahia, Uyo and Calabar that recorded above normal rainfall amounts.



**FIG. 3: COMPARISON OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 1 FEBRUARY 2014: FOR SOUTHERN STATES OF NIGERIA.**

**1.4 Number of Rain Days.**

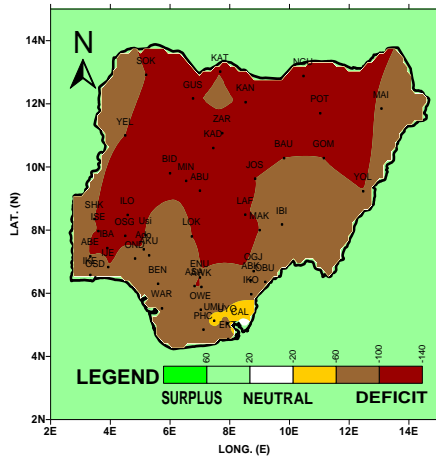


**Fig.4: NUMBER OF RAIN DAYS**

*Fig. 4* above shows the distribution of rainfall across the country and indicates that the stations in the South that recorded rains had 1 to 2 rain-days.

**2.0 SOIL MOISTURE CONDITION**

The soil moisture indices across the country are shown in *Fig. 5* below. The country was under deficit soil moisture condition except part of the South-south that showed normal-neutral soil moisture condition.

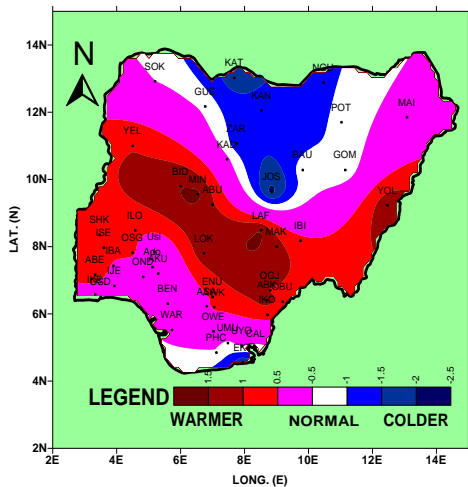


**Fig. 5: 1ST DEKAD OF FEBRUARY SOIL MOISTURE INDEX (SMI)**

**3.0 MAXIMUM TEMPERATURE TREND**

**3.1 Maximum Temperature Anomaly**

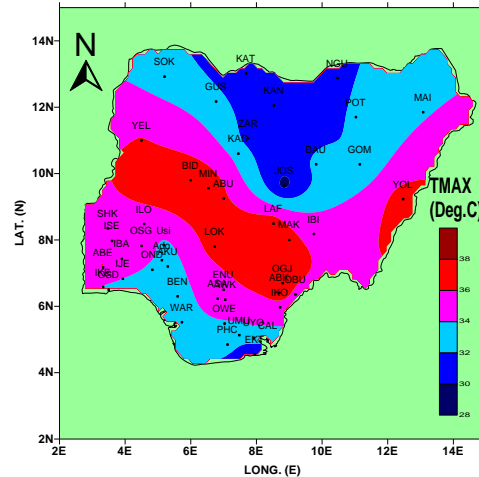
*Fig 6* below shows the maximum temperature anomaly across the country and indicates that some parts (blue areas) of the northern states were colder than normal maximum temperatures anomalies. The central and southern states had warmer than normal maximum temperature anomalies. Areas in and around Eket showed normal- to- colder anomalies.



**Fig.6: Maximum Temperature Anomaly.**

**3.2 Maximum Temperature Values**

The actual mean maximum temperature distribution across the country shown in *Fig 7* below indicates that some parts of the extreme North recorded  $32^{\circ}C$  and below, while Yelwa and Yola areas that had above  $36^{\circ}C$ . The central and southern states recorded maximum temperatures ranging from  $30$  to  $36^{\circ}C$ . Jos recorded the lowest value of  $29.4^{\circ}C$ .



**Fig. 7: Mean maximum Temperature**

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

**4.1 Weather Outlook**

The position of ITD is likely to fluctuate between latitude 8deg. N & 9degN. The northern and central parts of the country are expected to have hazy weather conditions. The inland areas are expected to be sunny and cloudy, while the coastal areas may likely have cloudy conditions with localized showers/thunderstorms.

The expected mean maximum temperature in the North will range from  $34^{\circ}C$  to  $41^{\circ}C$ , while the mean minimum temperature will be between  $22^{\circ}C$  and  $26^{\circ}C$ . In the inland and coastal areas, the mean maximum temperatures are expected to lie between  $32^{\circ}C$  and  $35^{\circ}C$ , while the mean minimum temperature will range from  $22^{\circ}C$  to  $25^{\circ}C$ .

**4.2 Agricultural Activity/Outlook**

Land preparation for rainy season /rain-fed farming is expected to continue in the southern part of the country in the 2nd dekad of February. Harvesting and packaging of vegetables and rice are expected to continue in the North.

**TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD**

STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	GDD	RAD	MINNA	0	0	59.5	37.5	23.6	225.5	23.4
ABEOK	0	0	54.5	36.1	24.5	223.1	21.6	NGURU	0	0	52.2	31.7	18.4	170.6	22.6
ABUJA	0	0	61	36.3	20.8	205.3	24.9	OGOJA	1.7	1	59.3	36.1	21.4	207.7	24.1
AKURE	12.6	2	48	33.2	23.6	204	19.6	ONDO	-	-	-	-	-	-	-
ASABA	-	-	-	-	-	-	-	OSHODI	20.1	1	46.5	33.4	24.6	210.1	18.8
AWKA	0	0	53.5	35.3	23.9	215.8	21.4	OSOGBO	0	0	56.7	35.4	22.0	206.9	23.1
BAUCHI	0	0	54.5	32.5	18.4	174.3	23.5	OWERRI	0	0	51.9	33.8	22.6	201.9	21.1
BENIN	3.3	1	46.1	33.3	24.6	209.3	18.7	PHC	7.3	2	48.5	32.9	23.1	199.9	20
BIDA	0	0	58.2	37.2	23.9	225.3	22.9	POT	0	0	55.6	32.2	16.8	165.1	24.4
CALABAR	46.8	2	47.3	32.5	23.0	197.3	19.6	SHAKI	0	0	56.3	35.5	22.5	209.5	22.8
EKET	2.1	2	39.3	30.0	23.2	185.6	16.6	SOKOTO	0	0	53	33.0	20.0	185	22.4
ENUGU	0	0	57.5	35.2	21.3	202.4	23.6	UMUAHIA	29	1	47.8	32.8	23.2	200.1	19.7
GOMBE	0	0	54.7	32.1	17.8	169.6	23.8	UYO	12.6	2	48.2	33.2	23.6	204	19.7
GUSAU	0	0	52.1	32.7	20.2	184.6	22	WARRI	11.8	2	45.2	33.4	25.2	212.9	18.2
IBADAN	0	0	52.1	35.0	24.0	215	20.9	YELWA	0	0	60.6	36.1	20.3	201.7	24.9
IJEBU	0	0	49.5	34.0	23.9	209.4	20.1	YOLA	0	0	61.1	37.0	21.8	214.1	24.6
IKEJA	-	-	-	-	-	-	-	ZARIA	0	0	53.2	31.3	17.4	163.7	23.4
IKOM	-	-	-	-	-	-	-	OBUDU	-	-	-	-	-	-	-
ILORIN	0	0	56.5	35.5	22.2	208.4	22.9	IBI	-	-	-	-	-	-	-
ISEYIN	0	0	56.7	35.3	21.9	206	23.2	ADO-EKITI	0	0	54	33.7	20.9	193.1	22.5
JOS	0	0	54.6	29.4	12.8	130.9	25.6	USI-EKITI	0	0	62.1	33.5	14.5	160	27.5
KADUNA	0	0	55.8	33.3	19.0	181.4	23.7	CALARMA	-	-	-	-	-	-	-
KANO	0	0	58.1	31.4	13.2	142.8	26.6								
KATSINA	0	0	51.9	30.3	16.1	151.7	23.3								
LAFIA	0	0	61.8	37.3	21.9	216.2	24.8								
LOKOJA	0	0	61	36.8	21.6	212	24.6								
MAIDU	-	-	-	-	-	-	-								
MAKURDI	0	0	61.6	36.6	20.7	206.5	25.1								

Note: RAINFALL (mm)  
 PET(mm/day)  
 TMAX (°C)  
 TMIN (°C)  
 GDD (day)  
 RAD (MJ/m<sup>2</sup>/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:

The Director-General/CEO,

Nigerian Meteorological Agency (NIMET),

National Weather Forecasting and Climate

Research Centre, Nnamdi Azikiwe International

Airport, PMB 615 Garki, Abuja.

E-mail: [agrometbulletin@nimet.gov.ng](mailto:agrometbulletin@nimet.gov.ng); NIMET WEB SITE: [www.nimet.gov.ng](http://www.nimet.gov.ng)