



NIGERIAN METEOROLOGICAL AGENCY

NATIONAL WEATHER FORECASTING AND CLIMATE RESEARCH CENTRE, BILL CLINTON DRIVE, NNAMDI AZIKIWE INTERNATIONAL AIRPORT, P.M.B. 615, GARKI, ABUJA, NIGERIA

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<u>SUMMAR</u>Y

The dekad under review showed that the position of Inter Tropical Discontinuity (ITD) remained above the country and rainfall activities is well established across the country. Normal to above-normal rainfall was recorded in the North except Maiduguri, Nguru and Potiskum, the central states recorded normal rainfall except Abuja and Kaduna. Normal to above rainfall was also recorded over the South except the Ogoja Owerri axis. Maximum temperature values still remained high especially in Maiduguri. The highest rainfall amount was recorded at Calabar with 293.2mm in 9 rain days, followed by Ilorin with 241.5mm in 4 rain-days and Ijebu-Ode with 218.8mm in 5 rain-day. Harvest of New yam and corn/maize continued in the central and southern states, while in the extreme North planting of Sorghum is the major activity during the dekad and is expected to continue.

1.0 RAINFALL PARTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

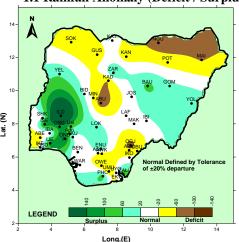


Fig.1: 2ND DEKAD JULY RAINFALL ANOMALIES

Rainfall anomaly over the country as shown in *Fig.1* above shows that the north recorded deficit except Yola, Gombe, Zaria, Ilorin and Bauchi that had surplus; The south had normal to surplus except Abeokuta, Ogoja, Owerri and environs that had experienced deficit rainfall anomaly.

1.2 Rainfall Amounts

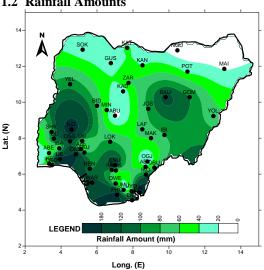
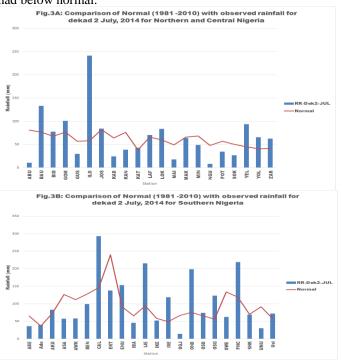


Fig.2 above shows the actual observed rainfall amount measured over the country for the dekad. Stations across the country recorded good rainfall except Maiduguri and Nguru. The highest rainfall amount was recorded at Calabar with 293.2mm in 9 rain days, followed by Ilorin with 241.5mm in 4 rain-days and Ijebu-Ode with 218.8mm in 5 rain-day. These stations with high values should monitor their farmlands to avoid possible flooding.

1.3 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE DEKAD

The comparison of the actual rainfall amounts measured and normal during the dekad over the northern and southern parts of the country is shown below in *Fig.3A* and *Fig.3B* respectively. Normal condition was experienced over in the North with Bauchi, Ilorin, Lokoja and Yelwa having above normal rainfall (*Fig.3A*). Most stations in the South in *Fig.3B* recorded normal to abovenormal rainfall except Owerri, Ogoja and Abeokuta that had below normal.



1.4 Number of Rain Days.

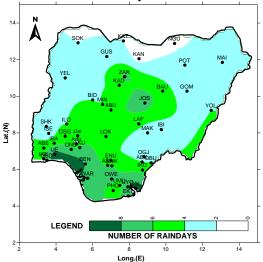


Fig.4: NUMBER OF RAIN DAYS

The Fig. 4 above is the distribution of rainfall across the country and it shows that most stations in the country recorded at least 2 rain-days except Kano, Nguru that had only 1 rainday within the dekad; Stations in the South recorded as high as 6 to 9 rain-days. The distribution was adequate and good for rain-fed agriculture and it favoured crops growth and development in the country.

2.0 SOIL MOISTURE CONDITION

Fig. 5 below shows the soil moisture indices across the country and indicates that the country was under normal to surplus soil moisture conditions except the Extreme North that experienced deficit soil moisture. The South and central states had normal to surplus soil moisture conditions.

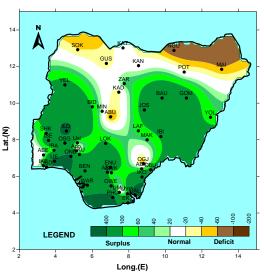


Fig.5: 2ND DEKAD OF JULY SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

Fig.6 below shows the maximum temperature anomaly across the country. It indicates that the Country is generally experiencing warmer than normal maximum temperature with the exception of Zaria, Shaki, Ekiti Eket and environs that had colder than normal maximum temperatures

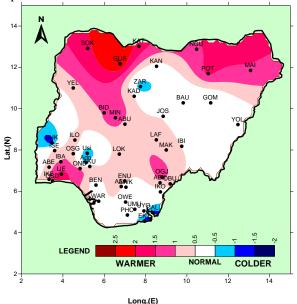


Fig.6: Maximum Temperature Anomaly. 3.2 Maximum Temperature Values.

The actual mean maximum temperature distribution across the country is shown in Fig.7 below and it reveals that the extreme North of the country recorded maximum temperatures in the range of $32^{0}C$ to $36^{0}C$. The Central states ranges from $24^{0}C$ to $31^{0}C$. Most stations in the South and central states recorded $31^{0}C$ and below.

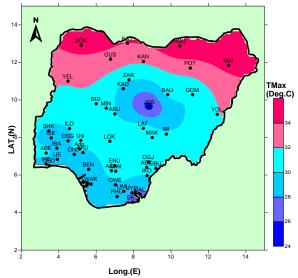


Fig. 7: Mean maximum Temperature

WEATHER/AGRICULTURAL **OUTLOOK** FOR DEKAD 3 (21 TO 31), OF JULY 2014

4.1 Weather Outlook

The position of Inter Tropical Discontinuity (ITD) is expected to oscillate between latitudes 19deg. N and 21degN. This feature is expected to place the northern part of the country under Cloudy weather conditions with thunderstorm/rains. The central part is expected to be cloudy with thunderstorm/rains. The inland and coastal areas are expected to be cloudy with rains/thunderstorms.

The mean maximum temperature in the North and the central will range from $25^{\circ}C$ to $31^{\circ}C$, while the mean minimum temperature will be between 17 ${}^{o}C$ and 24 ${}^{o}C$. In the inland and coastal areas, the mean maximum

temperatures are expected to lie between $26^{\circ}C$ and $28^{\circ}C$, while the mean minimum temperature will range from $21^{o}C$ to $24^{o}C$.

4.2 Agricultural Activity/Outlook

Harvesting of New yam, sweet corn and fresh vegetables will be the main activity in the South. In the North, farmers will engage in earthen, fertilizer application and sowing of Sorghum. Farmers are advised to use the NiMet's 2014 Seasonal Rainfall Prediction (SRP) for good agricultural planning and increased yields and other relevant publications like the Drought and Flood Monitor bulletin.

183.9

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD													
									MAKURDI	63.7	2	42.1	
STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	GDD	RAD		MINNA	48.9	4	39.1	
ABEOK									NGURU	8.4	2	50.3	
	36.3	5	35.4	30.5	24	192.5	14.7		OGOJA	14.5	3	39.7	
ABUJA								L	ONDO	198.7	7	34.6	
	10.4	6	38.5	30.1	22	180.4	16.4		OSHODI	74.4	7	32.7	
AKURE									OSOGBO	123	5	34.2	
	83.1	7	36	29.1	22	175.3	15.5		OWERRI	62.7	7	34	
ASABA	57.4	5	41.3	31.6	22.9	192.4	17.2		PHC	218.8	5	34.3	
AWKA	58.6	6	38.3	31.1	23.6	193.6	16		РОТ	34.4	2	41.2	
BAUCHI	133	5	39	30.5	21.9	182.1	16.5		SHAKI	69	4	37.6	
BENIN	99.5	8	32.2	29	23.4	181.8	13.7		ѕокото	26.8	2	45.3	
BIDA	77.5	4	39.7	31.6	23.4	194.9	16.5		UMUAHIA	30.4	5	35.6	
CALABAR	293.2	9	29.9	27.4	22.2	168.4	13		UYO	45.7	8	28.2	
EKET	138.3	7	35.6	27.3	19.8	155.4	15.6		WARRI				
ENUGU	153.4	4	41.6	30.6	21.2	179.2	17.8		YELWA	93.7	4	40.4	
GOMBE	101	3	37.7	30.2	22.4	183.2	16		YOLA	65.5	4	38.3	
GUSAU	29.7	3	46.4	33.4	22.1	197.9	19.2		ZARIA	62.8	7	40.8	
IBADAN	45.8	5	35.7	29.6	22.7	181.3	15.2		OBUDU				
IJEBU	215.2	9	32.3	28.8	23.1	179.6	13.8		IBI				
IKEJA	52.7	6	32.6	29.3	23.7	185	13.8		ADO-EKITI	35.9	5	34.6	
IKOM									USI-EKITI	35	4	43.4	
ILORIN	241.5	4	37.7	30.1	22.4	182.4	16		CALARMA				
ISEYIN	119.3	3	35.5	28.9	21.9	174.4	15.3						
JOS	84.4	7	34.6	24.9	16.8	128.7	16.3	1	Note:	AINIEALI	()		
KADUNA	24.1	4	38.3	29.4	21.1	172.5	16.6	RAINFALL (mm) PET (mm/day)					
KANO	38.7	1	42.5	32.3	22.7	195.1	17.6		TMAX (°C)				
KATSINA	42.6	2	43.3	34	24.5	212.6	17.4		TMIN (°C) GDD (day)				
	1		1			1		1	•	()			

MINNA	48.9	4	39.1	30.8	22.6	186.6	16.5
NGURU	8.4	2	50.3	35.9	23.3	215.7	20.1
OGOJA	14.5	3	39.7	31.5	23.4	194.1	16.5
ONDO	198.7	7	34.6	29.1	22.5	178.1	14.8
OSHODI	74.4	7	32.7	29.8	24.2	189.6	13.7
OSOGBO	123	5	34.2	28.9	22.4	176.5	14.7
OWERRI	62.7	7	34	29.3	23.1	182.4	14.4
PHC	218.8	5	34.3	29.2	22.9	182.4	14.4
РОТ	34.4	2	41.2	32.9	24.1	204.9	16.8
SHAKI	69	4	37.6	29.7	22	178.8	16.1
ѕокото	26.8	2	45.3	34.7	24.6	215.3	18.2
UMUAHIA	30.4	5	35.6	30.1	23.4	187.4	15
UYO	45.7	8	28.2	27.5	22.8	171.7	12.2
WARRI							
YELWA	93.7	4	40.4	32.2	23.6	199	16.7
YOLA	65.5	4	38.3	31.9	24.4	201.4	15.7
ZARIA	62.8	7	40.8	30.2	20.8	175.1	17.6
OBUDU							
IBI							
ADO-EKITI	35.9	5	34.6	28.7	21.9	172.8	14.9
USI-EKITI	35	4	43.4	28.8	17.4	151.1	19.5
CALARMA							

GDD (day) RAD (MJ/m²/day)

Dear All.

LAFIA

LOKOJA

MAIDU

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:

16.8

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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; NiMet WEB SITE: www.nimet.gov.ng

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