



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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SUMMARY

The first dekad under review experienced similar weather characteristics with the preceding dekad as the southward movement of the Inter Tropical Discontinuity (ITD) continued with its position remaining above the country and also witnessed widespread of rainfall activities across the country. Normal to below-normal rainfall was recorded over most cities in the country. The highest rainfall amount was recorded over Ilorin with 202.4mm in 7 rain-days, followed by Benin with 149.1mm in 6 rain-days and Calabar with 142.2mm in 8 rain-day. Maiduguri recorded the least rainfall amount with 2.6mm in 1 rain-day. The highest maximum temperature value of 34.4°C was recorded over Maiduguri, while Jos recorded the lowest value of 26.5°C. Harvest of yams, sweet potatoes, groundnut, fresh vegetables and corn/maize etc. continued across the country; In the extreme North harvest of millet, transplanting from nursery bed to main farm of most vegetables are among other farming activities continued during the dekad and such activities would be expected to continue in the subsequent dekad.

1.0 RAINFALL PARTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

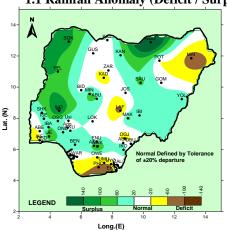


Fig.1: 2ND DEKAD SEPT, RAINFALL ANOMALIES
Rainfall anomaly over the country as shown in *Fig.1* above reveals that most part of the country recorded normal to surplus rainfall anomalies, except Maiduguri, Kaduna, Lafia, Ogoja, Ikeja, Owerri, Port-Harcourt, Umuahia and Uyo that recorded deficit rainfall anomalies as compared to the normal (1981-2010).



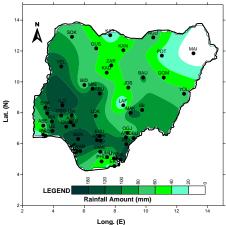
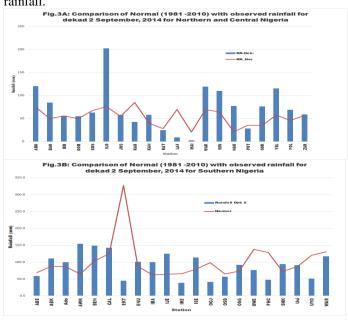


Fig.2 above depicts the actual observed rainfall amount measured over the country for the 2^{nd} dekad of September

and it shows the distribution of rainfall across the country in terms of amount. The highest rainfall amount was recorded over Ilorin with 202.4mm in 7 rain-days, followed by Benin with 149.1mm in 6 rain-days and Calabar with 142.2mm in 8 rain-day. Maiduguri recorded the least rainfall amount with 2.6mm in 1 rain-day.

1.2 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE 2^{ND} DEKAD OF SEPTEMBER

The comparison of the actual rainfall amounts measured and normal/long term averages during the dekad over the northern and southern parts of the country is shown below in *Fig.3A and Fig.3B* respectively. Normal to belownormal rainfall was experienced over the North except Abuja, Ilorin, Makurdi, Minna and Yelwa that recorded above-normal rainfall (*Fig.3A*). Most stations in the South in *Fig.3B* recorded normal to below-normal rainfall except Awka, and Ijebu-Ode that had above-normal rainfall.



1.3 Number of Rain Days.

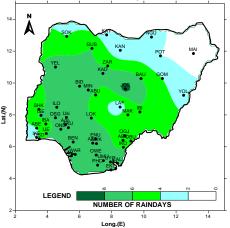


Fig.4: NUMBER OF RAIN DAYS

The rainfall distribution across the country is shown in *Fig. 4* above and it reveals that the country had a distribution of rainfall such that most stations the North east recorded between 1 to 7 rain-day, the Northwest and the Central states had between 2 to 9 rain-days. The south had between 3 to 8 rain-days. Jos had 9 rain-days.

2.0 SOIL MOISTURE CONDITION

Fig. 5 below shows the soil moisture indices across the country for dekad and it indicates that the country was under normal to surplus soil moisture conditions except Maiduguri, Potiskim, Katsina, and Lafia that experienced deficit soil moisture.

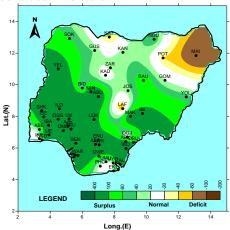


Fig.5: 2^{ND} DEKAD OF SEPTEMBER SOIL MOISTURE INDEX (SMI)

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, generally experienced normal temperature conditions. However, Sokoto, Kano, Nguru, Eket and Isheyin had colder than normal temperature, while Maiduguri, Gombe, Yola,

Abakaliki and Port-Harcourt experienced warmer conditions.

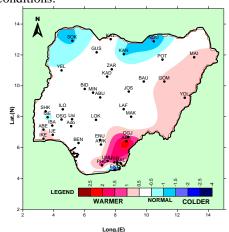


Fig.6: Maximum Temperature Anomaly.

3.2 Maximum Temperature Values.

Fig.7 below shows the actual mean maximum temperature distribution across the country and it reveals that the extreme North of the country recorded maximum temperatures in the range of $31^{0}C$ to $34.4^{0}C$. The Central states had ranges from $26^{0}C$ to $31^{0}C$. Stations in the southern states recorded $29^{0}C$ to $32^{0}C$. The highest value of $34.4^{0}C$ was recorded over Maiduguri, while Jos recorded the lowest value of $26.5^{0}C$

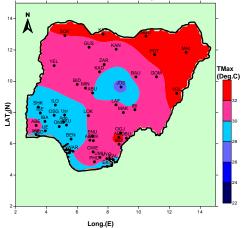


Fig. 7: Mean maximum Temperature

Normalized Difference Vegetative Index

WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 3 (21 TO 30), OF SEPTEMBER, 2014 4.1 Weather Outlook

The Inter Tropical Discontinuity (ITD)'s position is expected to fluctuate between latitudes 15deg. N and 16.5degN. Cloudy weather conditions with rains and occasional thunderstorms are expected in the northern and central states of the country. The inland and coastal areas will remain cloudy with localised rain and occasional thunderstorms.

The mean maximum temperatures in the North and the central will range from $27^{o}C$ to $35^{o}C$, while the mean minimum temperature will be between $16^{o}C$ and $23^{o}C$. In the inland and coastal areas, the mean maximum

temperatures are expected to lie between $27^{o}C$ and $30^{o}C$, while the mean minimum temperature will range from $21^{o}C$ to $24^{o}C$.

4.2 Agricultural Activity/Outlook

Harvesting of yam, sweet potatoes, fresh corn and fresh vegetables was the major activity in the South and Central states and would continue. In the North, farmers were engaged in preparation of nurseries for tomatoes and other vegetables, harvesting of cowpea, groundnut, fresh Maize, early millet, vegetables like carrots, cabbage, sweet potatoes. Farmers are advised to use the NiMet's relevant publications and weather information such as the Drought and Flood Monitor bulletin, dekad agromet bulletin, daily weather information, for improved agricultural yields.

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

								OK THE D
STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	GDD	RAD	MAKURDI
ABEOKUTA	59.1	4	41.6	30.8	23.2	190.1	17.4	MINNA
ABUJA	120.2	5	44.8	30	20.7	173.5	19.4	NGURU
ABAKALIKI	110.6	5	47.4	32.6	23.3	199.5	19.5	OGOJA
AWKA	154.6	8	40.9	30.3	22.9	185.8	17.3	OSHODI
BAUCHI	84.7	6	46.5	31	21.1	180.3	19.8	OSOGBO
BENIN	149.1	6	37.7	29.4	23	182.1	16	OWERRI
BIDA	56	6	43.6	31.2	22.9	190.3	18.3	PHC
CALABAR	142.2	8	40.2	29.5	22.3	178.7	17.2	POT
EKET	44.8	8	41.3	27.1	18.7	149.1	18.7	SHAKI
ENUGU	101.2	8	45.8	30.2	20.6	174	19.8	SOKOTO
GOMBE	55.3	4	46	31.3	21.8	185.4	19.4	UYO
GUSAU	63	6	45.6	31.4	22.1	187.4	19.2	WARRI
IBADAN	99.4	4	40.6	29.6	22	177.8	17.4	YELWA
IJEBU	125	6	38.5	29.6	22.9	182.4	16.3	YOLA
IKEJA	38.6	3	38.6	29.7	23.1	183.7	16.4	ZARIA
ILORIN	202.4	7	40.7	29.2	21.4	173	17.6	ADO-EKITI
ISEYIN	113.4	7	41.3	29.2	21.1	172.1	17.9	USI-EKITI
JOS	58.2	9	44.4	26.5	15.7	131.1	20.8	
KADUNA	42.5	6	45.5	30.3	20.7	174.9	19.6	Note:
KANO	57.9	2	45	31.3	22.2	187.2	19	R P
KATSINA	25.1	3	48.3	32.7	22.5	195.7	20	T
LAFIA	8.9	2	41.3	31	23.6	192.8	17.2	TM G
MAIDUGURI	2.6	1	49.3	34.4	24.4	214	19.8	R

R THE D	EKAD						
MAKURDI	119.3	6	43.1	30.3	21.9	180.8	18.4
MINNA	110.1	8	43.8	30.6	22	182.6	18.6
NGURU	77.6	3	47.6	33	23.3	201.5	19.5
OGOJA	41.4	5	44	31.7	23.5	196.2	18.2
OSHODI	56.6	5	37.9	30	23.7	188.3	15.9
OSOGBO	91.8	8	39.2	29	21.9	174.3	16.9
OWERRI	76.4	6	42.3	30.5	22.6	185.3	17.9
PHC	47.5	7	42.5	30.8	23	189.2	17.8
POT	28.1	2	48.1	32.6	22.6	196.1	19.9
SHAKI	93.9	5	39.2	28.7	21.6	171.4	17
SOKOTO	76.2	4	47.2	32	21.9	189.4	19.8
UYO	51.1	6	44.6	31.2	22.6	189	18.7
WARRI	117.4	7	37.6	30	23.8	188.6	15.8
YELWA	115.4	7	47.3	31.5	21.4	184.5	20
YOLA	68.9	3	46	32.9	24.2	205.3	18.8
ZARIA	59.1	6	46.8	30.8	20.7	177.2	20.1
ADO-EKITI	99.5	8	42.3	29.5	21.2	173.5	18.3
USI-EKITI	91.4	7	45.3	28.9	19	159.8	20.1

RAINFALL (mm)
PET (mm/day)
TMAX (°C)
TMIN (°C)
GDD (day)
RAD (MJ/m²/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:

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