



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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recorded up to 20mm of rainfall. Soil moisture conditions were deficit in most of the country, except extreme coastal parts which had neutral to surplus. The country recorded normal to colder than normal maximum temperature anomalies except in some stations in the north and south which recorded warmer than normal temperature anomalies Most parts of the country recorded below 33°C of mean maximum temperature values. Jos recorded the lowest temperatures of 28.2°C. Weeding of dry season crops is expected to continue in the extreme northern parts of the country, while processing and packaging of harvested crops for second season farming is expected to continue.

1.0 RAINFALL PATTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

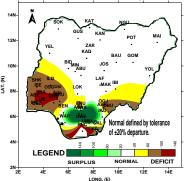
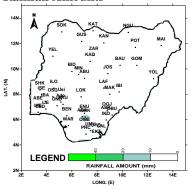


Fig.1: 2ND DEKAD DEC, RAINFALL ANOMALIES

Fig.1 above shows the rainfall anomalies over the country it indicates that the northern and central parts had normal rainfall anomalies while most parts of the south had deficit rainfall anomaly except areas like Awka, Umuahia and Owerri which showed normal to surplus rainfall anomalies.

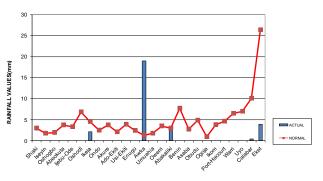
Rainfall Amounts



Actual rainfall amount observed for the dekad is highlighted in Fig.2 above and it shows that all stations recorded below 20mm of rainfall. Awka station recorded the highest amount of 19mm in one rain-day, followed by Eket with 3.9mm in 2 rain-days and Abakaliki with 3.4mm in 1 rain-day.

1.2 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE 3RD DEKAD OF NOVEMBER

Fig.3 below depicts the comparison of the actual rainfall amounts measured and normal/long term averages during the dekad over the southern parts of the country. It shows that only Awka stations recorded above normal amount of rainfall, while others recorded normal to below normal rainfall amounts.



N OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 2 DECEMBER RN STATES OF NIGERIA.

1.3 Number of Rain Days.

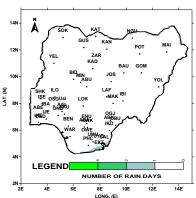


Fig.4: NUMBER OF RAIN DAYS

Fig.4 above shows the distribution of rainfall over the country and it indicates that no station recorded above to 2 days of rain among the few stations that recorded rain in the southern part of the country. Eket recorded 2 days of rain, while the rest recorded 1 day each of rain.

2.0 SOIL MOISTURE CONDITION

Soil moisture indices across the country is shown in *Fig.*5 below and it indicates that most parts of the country had deficit soil moisture conditions, except the extreme coastal part which showed neutral to surplus soil moisture conditions.

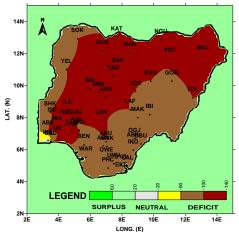


Fig.5: 2ND DEKAD OF DECEMBER SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND 3.1 Maximum Temperature Anomaly

Maximum temperatures anomaly over the country is shown in *Fig.6* below and it indicates that most parts of the country had normal to colder than normal maximum temperature anomalies, except parts of Sokoto, Yelwa, Bida, Minna, Abuja, Lokoja, Obudu, Ogoja, Shaki and Iseyin axis which had warmer than normal maximum temperature anomalies.

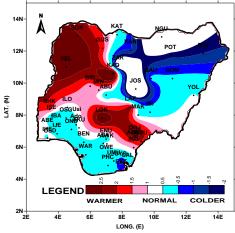


Fig.6: Maximum Temperature Anomaly.

3.2 Maximum Temperature Values.

Actual mean maximum temperature distribution across the country is depicted in Fig.7 below and shows that most parts of the country had mean maximum temperatures below $33^{0}C$ except some parts of Sokoto, Yelwa, Yola and some central and southern states that recorde above $33^{0}C$. Jos recorded the lowest temperatures of $28.2^{0}C$.

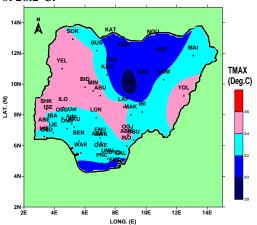


Fig. 7: Mean maximum Temperature

WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 3 (21 TO 31), OF DECEMBER, 2014 4.1 Weather Outlook

The position of Inter Tropical Discontinuity (ITD) is likely to oscillate between latitudes 5.5deg.N and 6.5degN. The sunny and hazy weather is expected over the northern part of the country while the central states are likely to be partly cloudy and sunny. The coastal areas of the South are expected to experience cloudy/partly weather conditions.

The northern and the central states are expected to have mean maximum temperatures between $28\,^{o}C$ and $32\,^{o}C$, while the mean minimum temperatures will range from 16 ^{o}C to $18\,^{o}C$. The mean maximum temperatures over the inland and coastal areas of the South are expected to lie between $30\,^{o}C$ and $32\,^{o}C$, while the mean minimum temperatures will range from $20\,^{o}C$ to $22\,^{o}C$.

4.2 Agricultural Activity/Outlook

Weeding of dry season crops is expected to continue in the extreme northern parts of the country, while in the southern parts packaging and processing of harvested crops for the second season farming expected also to continue.

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	GDD	RAD
ABEOKUTA	0	0	48.1	34.6	24.5	215.2	19.3
ABUJA	0	0	58	34.6	18.1	183.3	24.6
ABAKALIKI	3.4	1	49.9	34.2	23.1	206.2	20.3
AKURE	0	0	51.3	33.1	20.4	187.5	21.6
AWKA	19	1	49.8	33.4	21.7	194.4	20.7
BAUCHI	0	0	50.2	31.2	17.8	164.9	22
BENIN							
BIDA	0	0	55.2	35.4	21.5	204.2	22.6
CALABAR	0.4	1	44	31.5	22.3	189	18.5
EKET	3.9	2	36.3	29.5	23.2	183.4	15.4
ENUGU	0	0	50.1	32.9	21.0	189.4	21
GOMBE							
GUSAU	0	0	57.1	33.8	16.7	172.3	24.7
IBADAN							
IJEBU	0	0	44.6	33.0	24.0	205.2	18.2
IKEJA	2.1	1	XX	32.8	XX	XX	XX
·							
ILORIN	0	0	49.7	33.6	22.1	198.4	20.5
JOS	0	0	51.1	28.2	11.9	120.4	24.4
	0	0	55	32.2	15.8	160.2	24.3
KADUNA	0	0	56.4	30.5	10.4	124.2	26.7
KANO	0	0	51.4	30.4	15.1	147.5	23.3
KATSINA	0	0	58	35.8	20.2	200.3	23.9
LAFIA	0	0	52.9	33.6	20.2	188.9	22.3
LOKOJA						l	

I III D							
MAKURDI	4.7	1	52.9	33.0	18.9	179.7	22.6
MINNA	0	0	57.6	35.7	20.3	199.9	23.7
NGURU	0	0	XX	30.7	XX	XX	XX
OGOJA	0	0	53.5	34.3	20.9	196.2	22.2
OSHODI	0	0	44.4	33.2	24.2	206.7	18.1
OSOGBO	0	0	51.5	33.6	21.0	193	21.3
OWERRI	0	0	48.6	32.6	21.5	190.6	20.4
PHC							
POT	0	0	51.7	30.7	15.6	151.4	23.2
SHAKI	0	0	54.7	34.7	20.7	196.5	22.7
SOKOTO	0	0	57.3	34.2	17.1	176.4	24.6
UYO	0	0	44.5	31.7	22.3	189.6	18.7
WARRI							
YELWA	0	0	60.6	35.9	18.0	189.5	25.4
YOLA	0	0	XX	35.6	XX	XX	XX
ZARIA	0	0	53.8	30.9	14.1	145	24.6
ADO-EKITI	0	0	51.5	32.7	19.6	181.4	22
USI-EKITI	0	0	57.4	32.8	15.2	160.1	25.4

Note:

Rainfall (mm)

PET = Potential Evapotranspiration (mm/day)

TMAX = Maximum Temperature (°C) TMIN = Minimum Temperature (°C)

GDD = Growing Degree Day (day)

 $RAD = Radiation (MJ/m^2/day)$

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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