



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 1st dekad of March indicated a decline in rainfall amount in the Southern part of the country when compared to the 3rd dekad of February and the ITD continue to oscillate between latitude 8.5°N to 9.5°N. Soil moisture condition in the country was deficit except in the coastal parts of the South which had neutral to surplus conditions. The highest rainfall amount was recorded over Eket with 57.3mm in 4 rain-days, followed by Port hacourt with 53.6mm in 2 rain-days and Oshodi with 40.1mm in 3 rain-days. Maximum temperature anomalies were normal to colder than normal in most parts of the country except South west which had warmer than normal maximum temperature anomalies. Preparation for the new rainy season is expected to continue in the South while in the North, packaging of dry season crops such as rice and vegetables is expected to continue.

1.0 RAINFALL PATTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

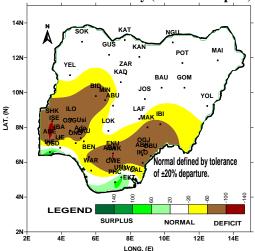
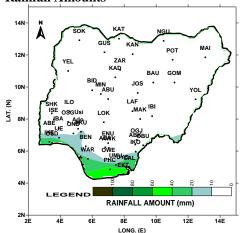


Fig.1: 1ST DEKAD MARCH, RAINFALL ANOMALIES Rainfall anomaly over the country is depicted in *Fig.1* above and it indicated that northern part of the country continue to have normal rainfall anomalies, while most parts of the south had deficit rainfall anomalies except parts of Eket and Lagos which showed surplus rainfall anomalies.

Rainfall Amounts



Actual rainfall amount is shown in *Fig.2* above and it indicates that there was decline in rainfall amount when compared to 3rd dekad of February in the southern part of

the country. The highest rainfall amount was recorded over Eket with 57.3mm in 4 rain-days, followed by Portharcourt with 53.6mm in 2 rain-days and Oshodi with 40.1mm in 3 rain-days.

1.2 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE 1ST DEKAD OF MARCH

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 in *Fig.3A and Fig.3B*. Stations in the North recorded normal to below normal rainfall (*Fig.3A*) while in the South Ijebu-Ode, Oshodi, Port Hacourt and Eket stations recorded above normal rainfall amounts while the rest recorded below normal rainfall (*Fig.3B*).

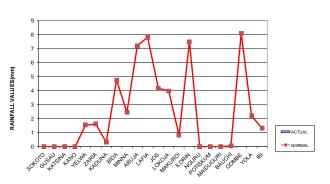


FIG. 3A: COMPARISON OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 1 MARCH 2015: FOR NORTHERN AND CENTRAL STATES OF NIGERIA.

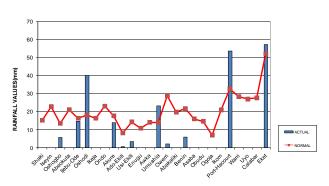


FIG. 3B: COMPARISON OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 1 MARCH 2015: FOR SOUTHERN STATES OF NIGERIA.

1.3 Number of Rain Days.

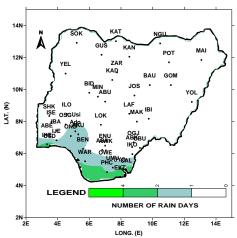


Fig.4: NUMBER OF RAIN DAYS

Rain-days distribution over the country is indicated in *Fig.4* above and it shows that rainfall distribution in the Southern parts of the country varies from 1 to 2 rain-days in the few stations that recorded rain. Only Eket recorded 4 days of rain.

2.0 SOIL MOISTURE CONDITION

Fig.5 below highlights soil moisture indices across the country for the dekad and it reveals that the country had deficit Soil Moisture conditions except coastal parts of the country which showed neutral to surplus soil moisture conditions.

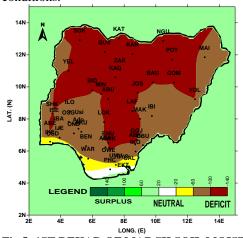


Fig.5: 1ST DEKAD OF MARCH SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

Fig.6 below shows the maximum temperatures anomalies over the country and it indicated that most parts of the country had normal to colder than normal maximum temperature anomalies, except parts of south west which had warmer than normal maximum temperature anomalies

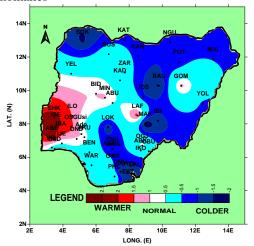


Fig.6: Maximum Temperature Anomaly.

3.2 Maximum Temperature Values.

Actual mean maximum temperature distribution across the country is shown in Fig.7 below and indicates that most parts of the country had maximum temperatures above $34^{9}C$ except Jos and Eket stations which recorded the lowest temperature values of $30.5^{9}C$ and $30.1^{9}C$ respectively.

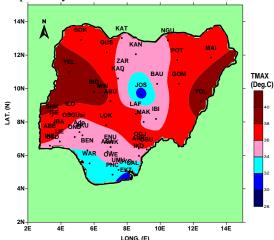


Fig. 7: Mean maximum Temperature

WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 2 (11 TO 20), OF MARCH, 2015 4.1 Weather Outlook

The position of Inter Tropical Discontinuity (ITD) is likely to fluctuate between latitudes 8.5 deg.N and 9.5 deg.N. The northern and central parts of the country are

expected to be sunny, dry and partly cloudy. The inland and coastal areas of the South are likely to experience partly cloudy/cloudy weather conditions and localized thunderstorms.

The northern and the central states are expected to have mean maximum temperatures of the range $30 \, ^{o}C - 38^{o}C$, while the mean minimum temperatures will lie between $18 \, ^{o}C$ and $24^{o}C$. The mean maximum temperatures over the inland and coastal areas of the South are expected to

be between $32^{o}C$ and $34^{o}C$, while the mean minimum temperatures will range from $20^{o}C$ to $22^{o}C$.

4.2 Agricultural Activity/Outlook

Preparation for the new rainy season is expected to continue in the Southern part of the country, while in the North packaging of dry season crops such as rice and vegetables is expected to continue.

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	GDD	RAD
ABEOKUTA	0	0	57.4	37.8	26.2	240.1	22.1
ABUJA	0	0	62.1	37.4	22.8	220.7	24.7
ABAK	0	0	55	35.9	24.8	223.6	21.7
Asaba	13.9	2	53.7	34.9	23.8	213	21.6
AKURE	0	0	50.7	34.8	25.2	219.8	20.2
AWKA	0	0	59.7	35.2	20.5	198.4	24.7
BAUCHI	5.9	1	47.9	34.0	25.3	216.9	19.1
BENIN	0	0	61.8	39.2	25.8	245.2	23.6
BIDA							
CALABAR							
EKET	57.3	4	41.5	30.1	22.9	185.2	17.6
ENUGU	0	0	50.8	34.3	24.4	213.3	20.5
GOMBE	0	0	61	37.0	22.8	219	24.3
GUSAU	0	0	62.7	36.6	20.6	205.7	25.5
IBADAN							
IJEBU	14.7	1	50.5	34.7	25.2	219.5	20.1
IKEJA							
ILORIN	0	0	58.8	36.9	24.1	224.8	23.2
ISEYIN	0	0	36	30.5	25.2	198.5	14.8
JOS	0	0	62.3	35.9	19.9	198.9	25.7
KADUNA							
KANO							
KATSINA	0	0	59.8	37.4	24.1	227.4	23.5
LAFIA	U	U	59.0	37.4	24.1	221.4	23.5

KIHED	LKAD						
LOKOJA	0	0	52.6	36.2	26.2	231.9	20.5
MAKURDI	0	0	57.3	35.5	22.7	211	23.2
MINNA	0	0	63.9	39.1	24.4	237.4	24.7
NGURU	0	0	xx	36.0	XX	XX	XX
OGOJA	0	0	59.6	37.0	23.8	224.2	23.6
OSHODI	40.1	3	46.9	34.0	25.7	218.4	18.7
OSOGBO	5.8	1	57.7	36.2	23.7	219.3	23
OWERRI	2.1	2	53.2	34.0	22.8	203.7	21.8
PHC	53.6	2	51.4	33.5	23.1	183.1	21
POT	0	0	63.3	36.3	19.9	201	26
SHAKI	0	0	62.2	37.8	23.5	226.5	24.5
SOKOTO	0	0	64.4	37.0	19.9	204.4	26.3
UMUAHIA	23.3	1	49.8	33.6	23.9	207.6	20.3
WARRI							
YELWA	0	0	67.5	39.3	22.3	228	26.5
YOLA	0	0	xx	39.2	XX	xx	XX
ZARIA	0	0	60.4	34.9	19.5	191.9	25.2
ADO-EKITI	0.6	1	56.8	35.5	23.1	212.9	22.9
USI-EKITI	3.4	1	62.2	35.0	18.8	189.3	26.1

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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