

Agrometeorological Bulletin No.6, Dekad 3, February (21 –28) 2015 ISSN: 2315-9790

SUMMARY

The dekad under review that is 3rd dekad of February indicated that a many stations in the South and some central states have recorded rain and the ITD continue to oscillate between latitude 8^oN to 9.5^oN. Soil moisture condition in the country was deficit except in part of South and central parts which had neutral to surplus conditions. Rainfall anomaly in most parts of the South was surplus. The highest rainfall amount was recorded over Eket with 115.6mm in 7 rain-days, followed by Makurdi with 109.2mm in 3 rain-days and Ikeja with 79.6mm in 3 rain-days. Maximum temperature anomalies were warmer in the North and normal to colder than normal in the South and central. 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)

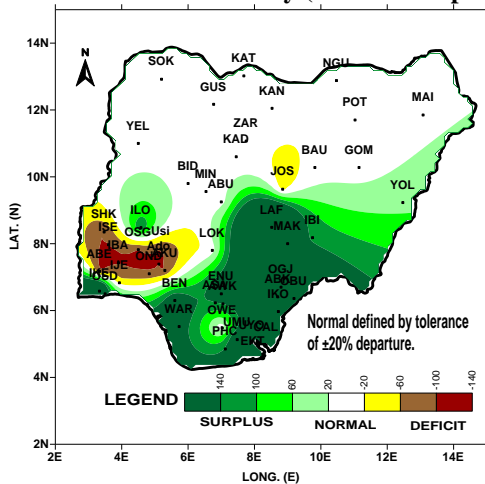


Fig.1: 3RD DEKAD FEB, RAINFALL ANOMALIES

Fig.1 above shows the rainfall anomaly over the country and it indicated that northern part of the country continue to have normal rainfall anomalies, while most parts of the south had surplus rainfall anomalies except Shaki, Iseyin Ibadan and Abeokuta which showed deficit rainfall anomalies.

Rainfall Amounts

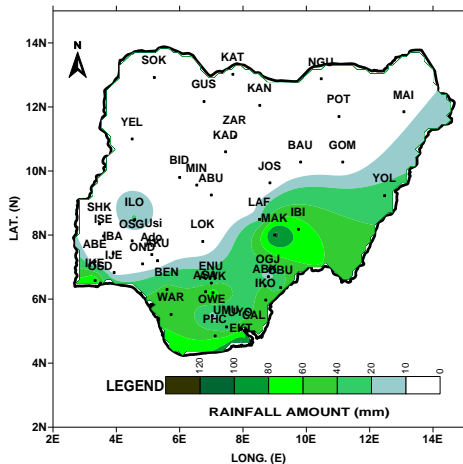


Fig.2 above indicates actual rainfall amount showing that some stations in the south and central parts have recorded rain in the dekad. The highest rainfall amount

was recorded over Eket with 115.6mm in 7 rain-days, followed by Makurdi with 109.2mm in 3 rain-days and Ikeja with 79.6mm in 3 rain-days.

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

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. Three stations in the North recorded above normal rainfall including; Lafia, Makurdi and Ilorin (Fig.3A) while in the South many stations recorded above normal rainfall (Fig.3B).

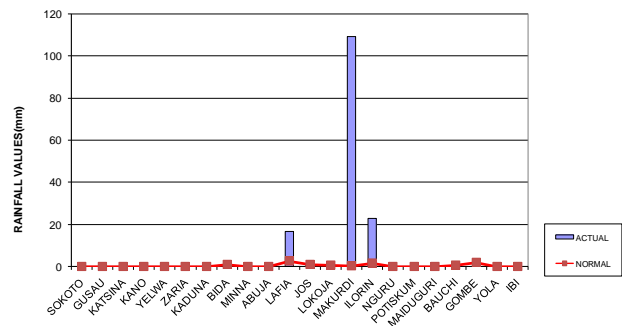


FIG. 3A: COMPARISON OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 3 FEBRUARY 2015: FOR NORTHERN AND CENTRAL STATES OF NIGERIA.

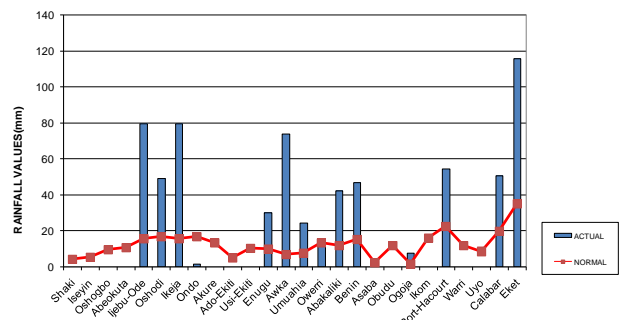


FIG. 3B: COMPARISON OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 3 FEBRUARY 2015: FOR SOUTHERN STATES OF NIGERIA.

1.3 Number of Rain Days.

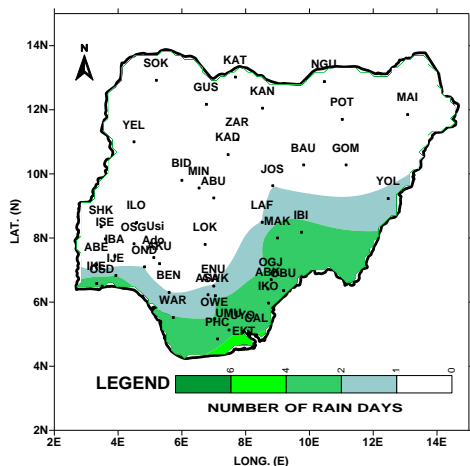


Fig.4: NUMBER OF RAIN DAYS

Rain-days distribution over the country is indicated in Fig.4 above and it shows that rainfall distribution in the central and southern parts of the country varies from 1 to 3 rain-days in the few stations that recorded rain. Only Eket recorded 7 days of rain.

2.0 SOIL MOISTURE CONDITION

Soil moisture indices across the country for the dekad is shown in Fig.5 below and it reveals that the country had deficit Soil Moisture conditions except the some parts of the central and South which showed neutral to surplus soil moisture conditions.

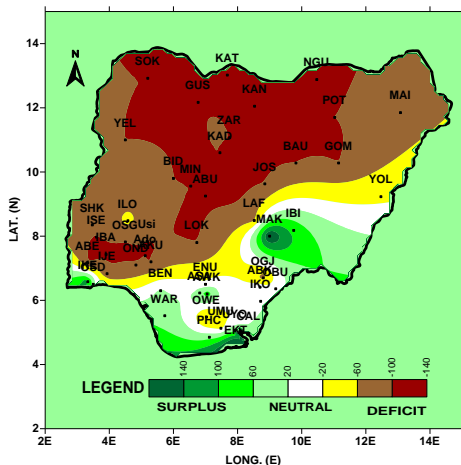


Fig.5: 3RD DEKAD OF FEBRUARY SOIL MOISTURE INDEX (SMI)

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 Gusau, Katsina, Gombe and Yola which had warmer than normal maximum temperature anomalies

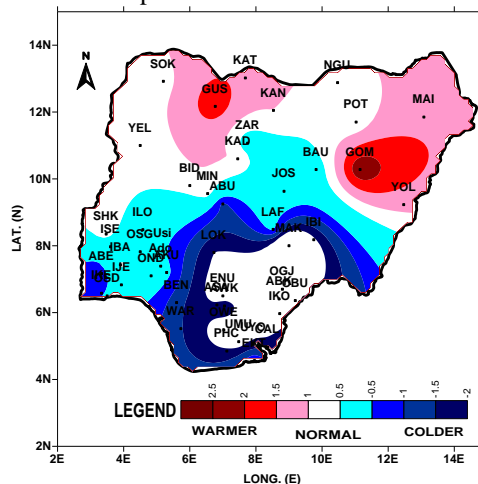


Fig.6: Maximum Temperature Anomaly.

3.2 Maximum Temperature Values.

Fig.7 below highlights the actual mean maximum temperature distribution across the country is highlighted in and indicates that most parts of the country had maximum temperatures above 34°C except Jos and Eket stations which recorded the lowest temperature values of 29.9°C and 29.5°C respectively.

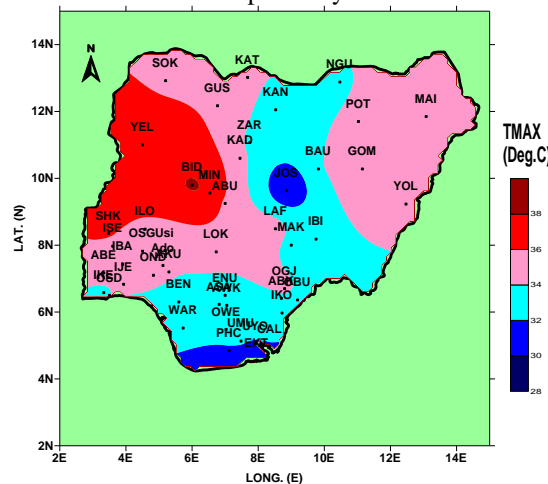


Fig. 7: Mean maximum Temperature

WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 1 (1 TO 10), OF MARCH, 2015

4.1 Weather Outlook

The position of Inter Tropical Discontinuity (ITD) is likely to fluctuate between latitudes 8deg.N and 9.5deg.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 °C - 38 °C, while the mean minimum temperatures will lie between 18 °C and 24 °C. The mean maximum temperatures over the inland and coastal areas of the South are expected to be between 32 °C and 34 °C, while the mean minimum temperatures will range from 20 °C to 22 °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	40.8	35.7	26.1	183.1	20
ABUJA	0	0	45.2	35.7	23.2	171.6	22.7
ABAK	42.2	3	38.9	33.7	24.4	168.6	19.6
ASABA	----	----	----	----	----	----	----
AKURE	0	0	41.9	34.2	23.2	165.9	21.3
AWKA	73.8	2	39.8	33.8	24.0	167	20.2
BAUCHI	0	0	44.6	33.7	20.4	152.3	23.3
BENIN	46.8	1	37.3	33.3	24.7	168.1	18.9
BIDA	0	0	45.9	38.2	26.4	194.4	22
CALABAR	50.7	4	36.7	31.8	23.1	155.7	19.1
EKET	115.6	7	33	29.5	22.0	141.9	17.7
ENUGU	30.2	1	35.5	32.9	24.8	166.8	17.9
GOMBE	0	0	45.9	36.0	23.1	172.4	23
GUSAU	0	0	47.3	35.5	20.8	161.1	24.3
IBADAN	0	0	42.2	35.5	25.0	177.9	20.9
IJEBU	5.1	2	40	34.4	24.8	173.1	20
IKEJA	79.6	3	36	33.0	24.9	167.7	18.2
ILORIN	22.7	1	44.4	35.4	23.4	170.9	22.3
ISEYIN	0	0	43.7	35.1	23.5	170.6	22
JOS	0.6	1	41.7	29.9	16.5	121.3	23.5
KADUNA	0	0	46.5	34.7	20.5	156.8	24.1
KANO	0	0	46.4	33.4	18.2	142.3	24.9
KATSINA	----	----	----	----	----	----	----
LAFA	16.7	1	55.4	35.3	24.3	174.5	21.2
LOKOJA	0	0	38.4	35.0	26.4	181.7	18.9
MAKURDI	109.2	3	38.2	33.1	23.5	162.3	19.5
MINNA	0	0	46.3	37.8	25.6	189.5	22.4
NGURU	0	0	XX	33.8	XX	XX	XX
OGOJA	7.6	2	39.8	34.3	24.6	171.5	19.9
OSHODI	48.9	3	36.7	34.0	25.9	175.8	18.2
OSOGBO	0	0	43.4	34.9	23.4	169	21.9
OWERRI	12.3	2	38.8	32.4	22.8	156.7	20.1
PHC	54.3	3	37.5	31.8	22.7	154.3	19.6
POT	0	0	47.2	34.4	19.1	149.8	24.9
SHAKI	0	0	47.1	36.4	23.1	174.2	23.5
SOKOTO	0	0	48.8	35.6	19.7	156.9	25.3
UMUAHIA	24.5	3	36.9	32.4	23.8	160.9	18.9
WARRI	----	----	----	----	----	----	----
YELWA	0	0	47.7	37.2	23.3	177.8	23.7
YOLA	----	----	----	----	----	----	----
ZARIA	0	0	45.1	33.6	19.7	149.4	23.8
ADO-EKITI	0	0	42.2	34.0	22.9	163.4	21.6
USI-EKITI	0	0	49	34.0	17.4	141.6	26.3

Note:
 Rainfall (mm)
 PET = Potential Evapotranspiration (mm/day)
 TMAX = Maximum Temperature (°C)
 TMIN = Minimum Temperature (°C)
 GDD = Growing Degree Day (day)
 RAD = Radiation (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:
 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