

Agrometeorological Bulletin No.32, Dekad 2, November (11 –20) 2014 ISSN: 2315-9790

SUMMARY

There was a drastic decline in rainfall amount in the country during the second dekad of November indicating the end of rainy season in most parts of the country. No station recorded rainfall in the North and the Central parts of the country whereas the stations in the South recorded below 100mm of rainfall except Eket station that had above. The ITD continued its southward movement with its position fluctuated between latitude 7⁰N to 8⁰N. The highest rainfall amount was recorded over Eket with 111.8mm in 7 rain-days, followed by Uyo with 77.9mm in 8 rain-days and Calabar with 52.5mm in 5 rain-days. Soil moisture conditions in the coastal South varied from neutral to surplus whereas in other parts deficit soil moisture conditions were recorded. The dekad witnessed increased maximum temperatures across the country with the highest value of 38.0°C at Sokoto while Eket had the lowest value of 28.0°C. Preparation for dry season farming remained a major activity over the North, while harvesting of yam and cocoa-yam from the first season and maize from the second season continued in the southern part of the country.

1.0 RAINFALL PATTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

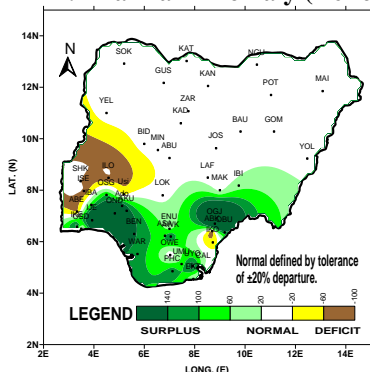


Fig.1: 2ND DEKAD NOV, RAINFALL ANOMALIES

Rainfall anomaly over the country is shown in Fig.1 above and it indicates that the northern and central parts of the country had normal rainfall anomalies except part of Ilorin which had deficit, while most parts of the South continued to record normal to surplus rainfall anomalies.

Rainfall Amounts

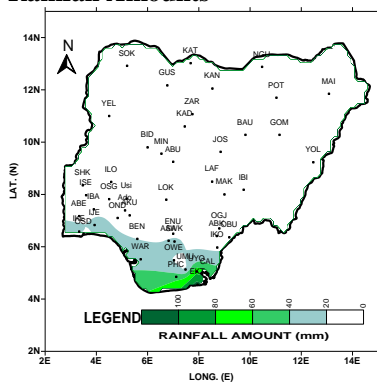


Fig.2 above indicates the actual rainfall amount observed for the dekad and it shows that rainfall had reduced drastically in the country indicating the end of rainy season in most parts of the country. This is good for harvest of tubers and vegetable crops in the South. The highest rainfall amount was recorded over Eket with 111.8mm in 7 rain-days, followed by Uyo with 77.9mm in 8 rain-days and Calabar with 52.5mm in 5 rain-days.

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

Fig.3 below shows 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 most stations recorded below normal rainfall except Eket, Calabar, Uyo, Port-hacourt, Awka, Ikeja and Ijebu-ode which had above normal rainfall amount.

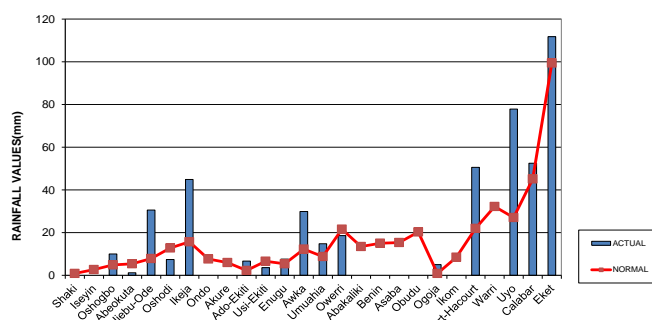


FIG. 3: COMPARISON OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 2 NOVEMBER 2014: FOR SOUTHERN STATES OF NIGERIA.

1.3 Number of Rain Days

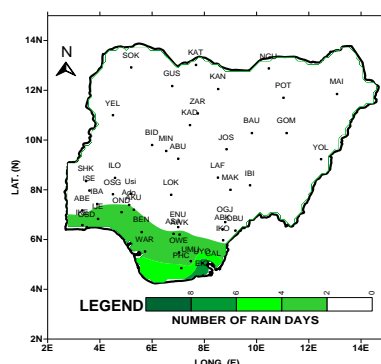


Fig.4: NUMBER OF RAIN DAYS

Distribution of rainfall over the country is shown in Fig.4 above and it indicates that the North and the central states recorded zero (0) number of rain-days. The stations in the South recorded 2 to 5 rain-days. The rainy season had almost given way to dry season.

2.0 SOIL MOISTURE CONDITION

Soil moisture indices across the country for the dekad are shown in Fig.5 below and it reveals that the central and northern parts of the country had deficit soil moisture conditions indicating the end of rainy season in the area. The coastal areas of the southern part had neutral to surplus soil moisture conditions

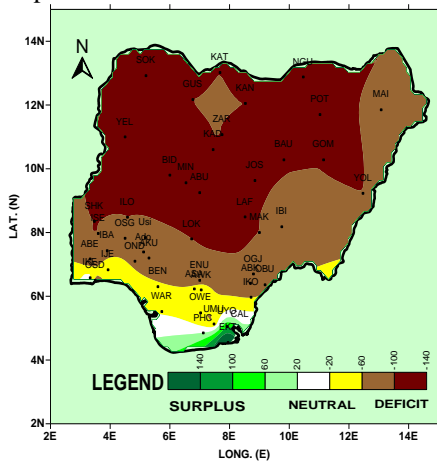


Fig.5: 2ND DEKAD OF NOVEMBER SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

Fig.6 below shows the maximum temperatures anomalies over the country and it indicates that the northern part of the country had normal to warmer than normal maximum temperature anomaly, while the central and southern parts had normal to colder than normal temperature anomalies except Ado-Ekiti, Usi-Ekiti and Akure that are slightly warmer.

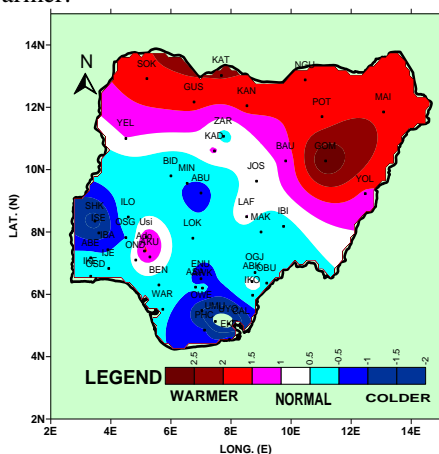


Fig.6: Maximum Temperature Anomaly.

3.2 Maximum Temperature Values.

Actual mean maximum temperature distribution across the country is depicted in Fig.7 below and indicates that most parts of the country had mean maximum temperatures above 32°C except Jos and Eket. The extreme North had mean maximum temperature above 34°C. Sokoto recorded the highest temperature value of 38.0°C while Eket station had the lowest value of 28.3°C.

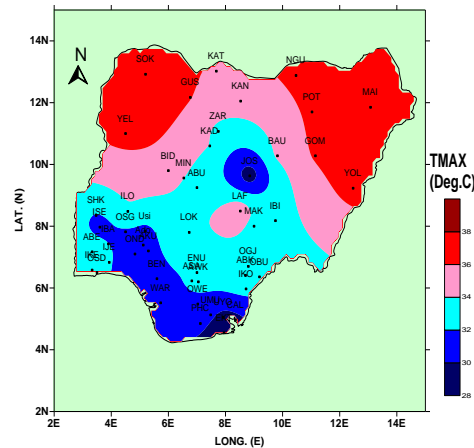


Fig. 7: Mean maximum Temperature

WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 3 (21 TO 30), OF NOVEMBER, 2014

4.1 Weather Outlook

The position of Inter Tropical Discontinuity (ITD) is likely to oscillate between latitudes 7deg. N and 8degN. 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 inland and coastal areas of the South are expected to experience cloudy/partly weather conditions with localized rains/showers.

The northern and the central states are expected to have mean maximum temperatures between 34 °C and 38 °C, while the mean minimum temperatures will range from 18 °C to 20 °C. The mean maximum temperatures over the inland and coastal areas of the South are expected to lie between 30 °C and 32 °C, while the mean minimum temperatures will range from 20 °C to 22 °C.

4.2 Agricultural Activity/Outlook

The rainy season had come and gone while the dry season farming has begun especially over the North and central areas. Farmers in these areas had commenced preparation while some had started planting especially making nursery beds. These activities will continue in next subsequent dekads. In the southern part, harvesting of yam, cocoa-yam of the first cropping and maize in second season continued.

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	GDD	RAD
ABEOKUTA	1.2	1	46.2	33.4	24.2	208.1	18.8
ABUJA	0	0	51.5	33.1	20.9	190.1	21.6
ABAK	0	0	50.4	34.1	23.2	206.3	20.5
AKURE	---	-----	----	-----	-----	-----	-----
AWKA	29.9	3	45.5	32.8	23.8	202.8	18.7
BAUCHI	0	0	56.2	34.4	19.8	191.3	23.5
BENIN	-----	---	----	-----	-----	-----	-----
BIDA	0	0	52.7	35.1	23.2	211.6	21.3
CALABAR	52.5	5	38.9	29.4	22.1	177.7	16.6
EKET	111.8	7	34.1	28.3	22.7	175.2	14.7
ENUGU	7.6	1	43.6	32.0	23.5	197.4	18
GOMBE	0	0	55.8	36.2	23.0	216.1	22.3
GUSAU	0	0	62.9	36.1	17.2	186.4	26.6
IBADAN	-----	-----	-----	-----	-----	-----	-----
IJEBU	30.6	4	44.6	32.1	23.3	196.8	18.5
IKEJA	44.9	4	XX	32.3	XX	XX	XX
ILORIN	0	0	50	33.8	22.8	203	20.5
ISEYIN	0	0	43.5	31.3	22.7	189.9	18.2
JOS	0	0	50.8	28.7	14	133.5	23.7
KADUNA	0	0	59	34.0	16.7	173.1	25.5
KANO	0	0	65	34.9	12.4	156.2	29
KATSINA	0	0	60.6	35.5	17.9	187.1	25.5
LAFA	0	0	53.5	35.6	23.6	216.1	21.4
LOKOJA	0	0	48.7	33.7	23.5	205.8	19.9

MAKURDI	0	0	48.1	33.2	23.0	200.6	19.8
MINNA	-----	-----	-----	-----	-----	-----	-----
NGURU	0	0	62.7	36.4	17.8	191.2	26.2
OGOJA	5	1	46.2	32.9	23.6	202.4	18.9
OSHODI	7.4	3	43.2	32.4	24.3	203.4	17.7
OSOGBO	18.6	2	42.9	31.2	22.8	189.9	18
OWERRI	50.6	5	42.3	30.7	22.5	185.9	17.9
PHC	0	0	64.8	36.3	15.9	181	27.6
POT	0	0	45.2	31.9	22.6	192.3	18.9
SHAKI	0	0	63.6	38.0	20.2	211.1	25.7
SOKOTO	77.9	8	37.5	29.2	22.4	178	16
UYO	-----	-----	-----	-----	-----	-----	-----
WARRI	0	0	58.9	36.7	21.4	210.5	23.8
YELWA	0	0	55.6	36.7	23.8	222.2	22.1
YOLA	0	0	57.1	33.5	17.2	173.5	24.7
ZARIA	6.7	2	45.4	31.6	22.2	189	19
ADO-EKITI	3.6	1	50.6	31.4	18.7	170.4	22
USI-EKITI							

Note:

Rainfall (mm)

PET = Potential Evapotranspiration (mm/day)

TMAX = Maximum Temperature ($^{\circ}$ C)

TMIN = Minimum Temperature ($^{\circ}$ C)

GDD = Growing Degree Day (day)

RAD = Radiation ($\text{MJ}/\text{m}^2/\text{day}$)

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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