

Agrometeorological Bulletin No.34, Dekad 1, December (1 –10) 2014 ISSN: 2315-9790

SUMMARY

There was no station that recorded above 20mm of rainfall in the country in the 1st dekad of December except Eket which had 116.1mm of rain. Soil moisture conditions in most parts of the country were deficit, except the extreme coastal parts which had neutral to surplus soil moisture conditions. The country recorded warmer than normal maximum temperature anomalies except in some stations in the north and south which recorded normal to colder than normal temperature anomalies. Most parts of the country recorded above 32^oC of mean maximum temperature values except parts of central and southern states, Jos and Eket recorded the lowest temperatures of 29.1^oC and 29.5^oC respectively. Planting 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)

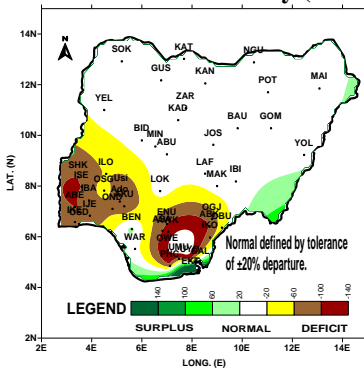


Fig.1: 1ST DEKAD DEC, RAINFALL ANOMALIES

Rainfall anomalies over the country is shown in Fig.1 above and it shows that most parts of the south had deficit rainfall anomaly except areas like Eket, Benin and Calabar which showed normal to surplus rainfall anomalies. The Northern and Central parts of the country had normal rainfall anomalies.

Rainfall Amounts

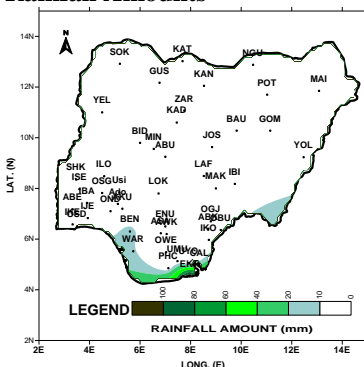


Fig.2 above depicts the actual rainfall amount observed for the dekad and it indicates that only few stations recorded rain and no station recorded above 20mm of rainfall except Eket station which recorded 116.1mm of rain in 6 rain-days.

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

The comparison of the actual rainfall amounts measured and normal/long term averages during the dekad over the southern parts of the country is shown in Fig.3 below. It shows that only three stations recorded above normal amount of rainfall, These are; Eket, Calabar and Benin the rest are either normal or below normal.

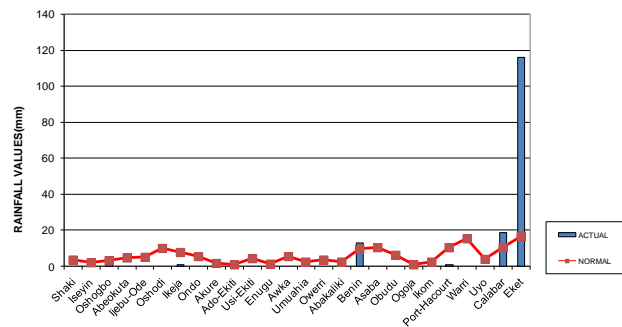


FIG. 3: COMPARISON OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 1 DECEMBER 2014: FOR SOUTHERN STATES OF NIGERIA.

1.3 Number of Rain Days.

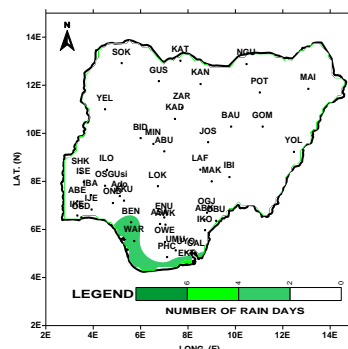


Fig.4: NUMBER OF RAIN DAYS

The 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 1 to 2 rain-days, except Eket with 6 rain-days.

2.0 SOIL MOISTURE CONDITION

Fig.5 below shows the soil moisture indices across the country for the dekad and it depicts that most parts of the country had deficit soil moisture conditions, except the coastal areas of the southern part which had neutral to surplus soil moisture conditions

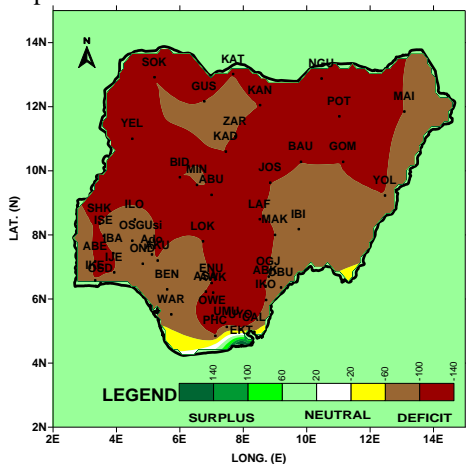


Fig.5: 1ST DEKAD OF DECEMBER SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

Fig.6 below shows the maximum temperatures anomaly over the country and it indicates that most parts of the country had warmer than normal maximum temperature anomaly, except parts of north-west, central states, south-west and south-south that had normal to colder than normal maximum temperature anomalies.

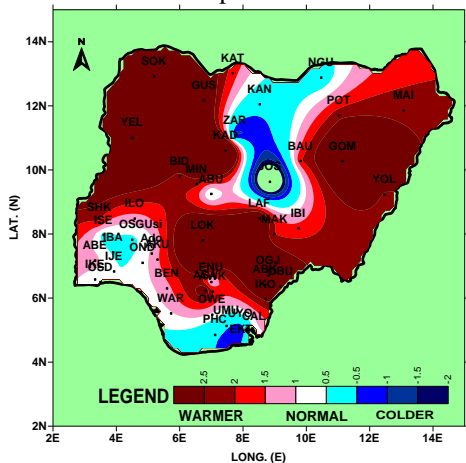


Fig.6: Maximum Temperature Anomaly.

3.2 Maximum Temperature Values.

Fig.7 below highlights the actual mean maximum temperature distribution across the country and indicates that most parts of the country had mean maximum temperatures above 32°C except some parts of the central and southern states. Jos and Eket recorded the lowest temperatures of 29.1°C and 29.5°C respectively

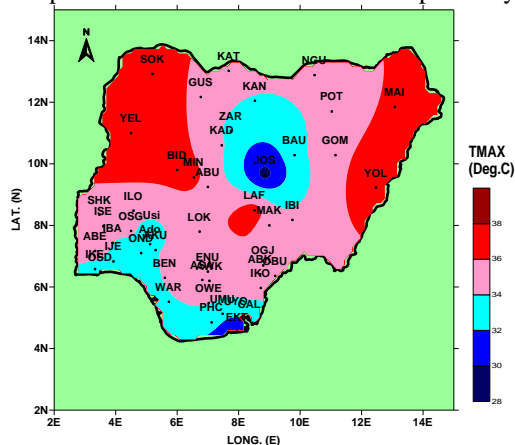


Fig. 7: Mean maximum Temperature

WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 2 (11 TO 20), OF DECEMBER, 2014

4.1 Weather Outlook

The position of Inter Tropical Discontinuity (ITD) is likely to fluctuate between latitudes 6deg. N and 7degN. 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 with localized rains/showers.

The northern and the central states are expected to have mean maximum temperatures between 30°C and 34°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

Planting of dry season crops is expected to continue in the extreme northern parts of the country especially places with irrigation projects, 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	48.7	35.2	25.2	221.8	19.3
ABUJA	0	0	60.1	35.0	17.3	181.6	25.6
ASABA	0	0	53.5	35.5	23.2	213.6	21.5
AKURE	0	0	49.7	33.9	22.9	204.1	20.3
AWKA	-----	-----	-----	-----	-----	-----	-----
BAUCHI	0	0	54.7	33.4	18.3	178.6	23.5
BENIN	13	3	46.9	34.1	24.6	213.5	18.9
BIDA	0	0	59.4	36.5	20.6	205.5	24.2
CALABAR	18.9	2	45.2	32.3	22.9	196	18.8
EKET	116.1	6	33.9	29.5	24.0	187.4	14.3
ENUGU	0	0	49.8	34.0	22.9	204.5	20.4
GOMBE	0	0	56.8	35.3	20.2	197.4	23.5
GUSAU	0	0	62.6	35.5	15.1	172.5	27.1
IBADAN	-----	-----	-----	-----	-----	-----	-----
IJEBU	0	0	44.6	33.2	24.4	207.7	18.1
IKEJA	0.8	1	XX	33.1	XX	XX	XX
ILORIN	-----	-----	-----	-----	-----	-----	-----
ISEYIN	0	0	49.8	33.9	22.8	203.7	20.4
JOS	0	0	53.5	29.1	11.5	123.1	25.5
KADUNA	0	0	61	34.3	14.8	165.8	26.7
KANO	-----	-----	-----	-----	-----	-----	-----
KATSINA	-----	-----	-----	-----	-----	-----	-----
LAFIA	0	0	61.4	37.2	20.4	207.8	24.9
LOKOJA	0	0	56.1	35.5	21.4	204.5	22.9
MAKURDI	0	0	56.5	34.6	19.6	191.4	23.6
MINNA	0	0	62.4	36.7	18.5	195.9	25.9
NGURU	0	0	XX	34.9	XX	XX	XX
OGOJA	-----	-----	-----	-----	-----	-----	-----
OSHODI	-----	-----	-----	-----	-----	-----	-----
OSOGBO	2.1	1	49.6	34.3	23.4	208.5	20.1
OWERRI	-----	-----	-----	-----	-----	-----	-----
PHC	0.8	1	47.4	33.0	22.8	198.8	19.5
POT	0	0	61.8	34.7	14.1	163.7	27.2
SHAKI	0	0	52.9	34.9	22.5	207	21.5
SOKOTO	0	0	62.3	36.8	18.0	193.7	25.9
UYO	0	0	43.7	32.2	23.5	198.5	18
WARRI	-----	-----	-----	-----	-----	-----	-----
YELWA	0	0	66	37.9	16.9	194.1	27.5
YOLA	0	0	XX	37.5	XX	XX	XX
ZARIA	0	0	57.8	33.4	15.8	166	25.3
ADO-EKITI	0.2	1	49.3	33.4	22.3	198.6	20.3
USI-EKITI	0	0	56.5	33.2	17.1	171.4	24.5

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