



NIGERIAN METEOROLOGICAL AGENCY
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SUMMARY

The dekad recorded reduced rainfall in parts of the extreme north indicating the beginning of cessation of the rainy season in that area. Most parts of the country had normal to surplus rainfall anomalies; however areas such as Sokoto, Gusau, Bida, Kaduna, Zaria, Maiduguri, Iseyin, Ibadan and parts of the Niger Delta area had deficit. Normal to surplus soil moisture condition prevailed in most part of the south and north central while the extreme north (Sokoto, Gusau, Katsina, Kaduna, Zaria, Kano, Nguru, Potiskum and Maiduguri) had deficit. Maximum temperature values in the extreme north (Sokoto, Gusau, Katsina, Kano, Nguru, Bauchi, Potiskum, Gombe, Yola and Maiduguri) were above 32 deg Celsius while elsewhere had below 32 deg Celsius. Harvest of cereal crops such as maize, millet and sorghum is expected to continue in parts of the north.

1.0 RAINFALL TREND

1.1 Rainfall Anomaly

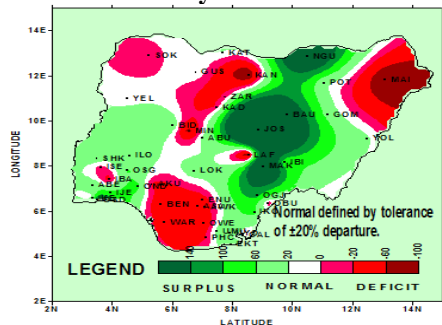


FIG1: 1ST DEKAD OF OCTOBER, 2011 RAINFALL ANOMALIES(%) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO 1971-2000 BASE PERIOD DEKADAL MEANS.

The rainfall anomaly over the country is shown in **Fig 1** above and indicates that most parts of the country had normal to surplus anomalies. However areas such as Sokoto, Gusau, Bida, Kaduna, Zaria, Maiduguri, Iseyin and parts of the Niger Delta area had deficit

1.2 Rainfall Amounts

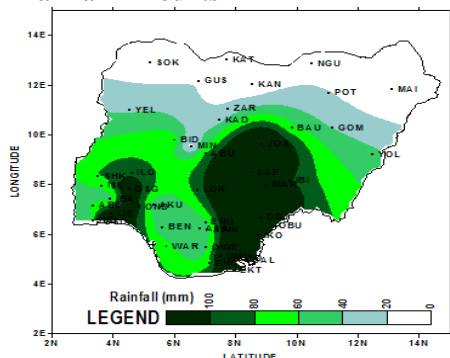


FIG2. ACTUAL AMOUNT OF RAINFALL(mm) FOR DEKAD 1, OCTOBER 2011.

Fig 2 also shows the actual rainfall received across the country and reveals that the south and north central had between 40mm and over 200mm of rains while northern

part of the country had between 0 to 40mm. The reduced rainfall amounts in parts of the north signified the beginning of the cessation of the rainy season in the area. The highest amount of rainfall of 219mm was received at Ikom followed by Makurdi and Ogoja with 213mm and 207mm respectively. The rainfall amounts received was generally favourable for crop development and supported crops that required high amounts of rains at this period of second cropping season in the south.

1.3 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE DEKAD

Figs 3A & 3B below show the comparison of the actual rainfall amounts with normal values in most stations across the north and south of the country. **Figs 3A and 3B** show that most stations across the north and south recorded rainfall above normal.

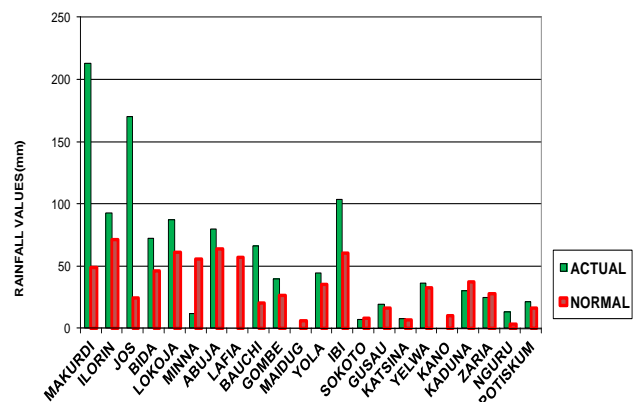


FIG. 3A: COMPARISON OF NORMAL WITH OBSERVED RAINFALLOF DEKAD 1, OCTOBER 2011: FOR NORTHERN AND CENTRAL STATES OF NIGERIA

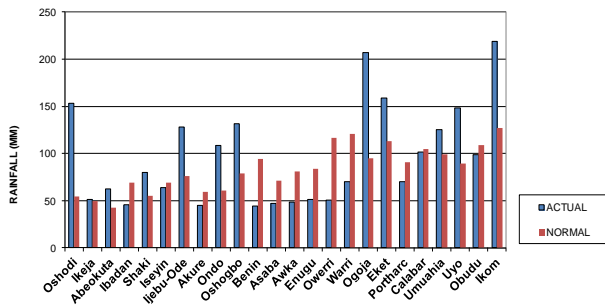
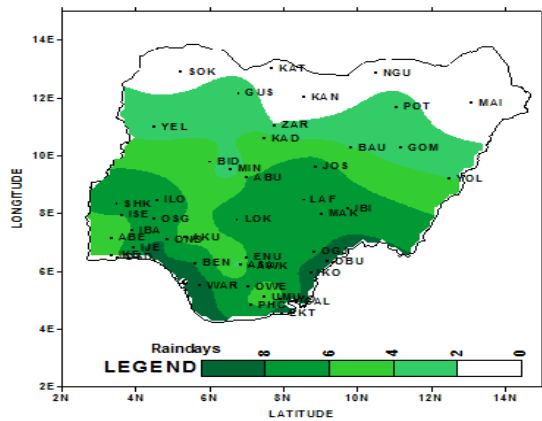


FIG. 3B: COMPARISON OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 1, OF OCTOBER 2011 : SOUTHERN STATES

1.4 Number of Rain Days

Fig 4 shows the number of rain days across the country and indicates that the extreme north had zero to 2 days of rainfall while the rest of the country had between 2 to over 8 days. The rainfall distribution was generally favourable for crop development and supported crops that required high spread of rains.



ACTUAL NUMBER OF RAINDAYS FOR DEKAD 1, OCTOBER 2011.

2.0 SOIL MOISTURE CONDITION

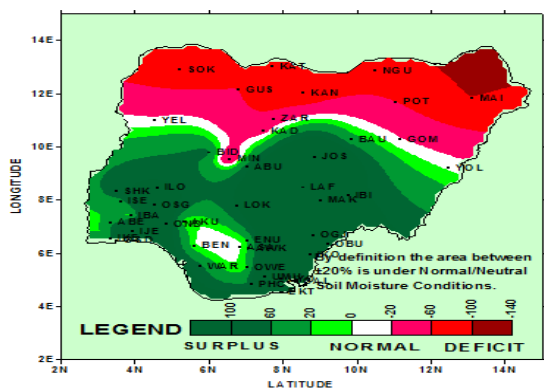


FIG5. 1ST DEKAD OF OCTOBER, 2011 SOIL MOISTURE INDICES.

The decadal distribution of soil moisture across the country is shown in Fig 5 and indicates that most parts of the south and north central had normal to surplus soil

moisture condition while the extreme north (Sokoto, Gusau, Katsina, Kaduna, Zaria, Kano, Nguru, Potiskum and Maiduguri) had deficit. Generally, the soil moisture across the country supported crop growth and development, ease tuber harvest and favoured moisture loving animals.

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

The trend of maximum temperature anomaly is shown in Fig 6 below and reveals that most parts of the country had normal temperatures except the extreme north (Sokoto, Katsina, Kano, Nguru, Potiskum and Maiduguri) which had warmer than normal temperatures. However areas in and around Jos, Shaki, and Eket were colder.

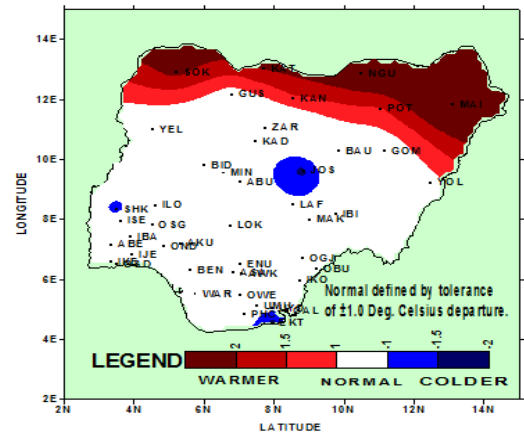


FIG.6. 1ST DEKAD OF OCTOBER, 2011 MEAN MAXIMUM TEMPERATURE ANOMALIES (Deg.C) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO 1971-2000 BASE PERIOD DEKADAL MEANS.

3.2 Maximum Temperature Values

The actual mean maximum temperature distribution is shown in Fig 7 below and indicates that the extreme north (Sokoto, Gusau, Katsina, Kano, Nguru, Bauchi, Potiskum, Gombe, Yola and Maiduguri) recorded temperatures above 32 Deg C, while elsewhere recorded temperatures below 32 Deg C. Generally, temperatures across the country favoured optimum growth and development and livestock performance.

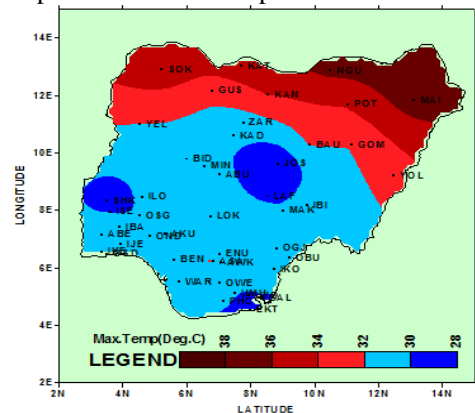


FIG.7. MEAN MAXIMUM TEMPERATURE FOR DEKAD 1, OCTOBER 2011.

4.0 WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 2 (11 TO 20), OF OCTOBER 2011

4.1 Weather Outlook

The Inter Tropical Discontinuity (ITD) is expected oscillate between Latitude *13.5 and 15.5 deg. north* during the period. The northern parts of the country are expected to experience cloudy to sunny weather conditions, while the central part is expected to be cloudy with localized thunder storms. The inland and coastal parts of the country are expected to be cloudy with widespread rainfall activities during the period.

Maximum temperatures for the north and central states are expected to range between *32°C and 34°C* while the

minimum temperatures will be from *22°C to 24°C*. Maximum temperatures for inland and coastal areas are expected to range from *30°C to 32°C* while the minimum temperatures will be between *22°C and 24°C*.

4.2 Agricultural Activity/Outlook

In the northern part of the country, harvest of cereal crops such as millet, maize and sorghum is expected to continue while in the south; crops such as cassava, yams, vegetables and cowpea are in various maturity stages and are being harvested. Also drying of grains and other farm produce is in progress.

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKA

STATION	RAINFALL(mm)	RAINDAY	PET(mm)	TMAX(Deg C)	TMIN(Deg C)	Degree Days	RADIATION (MJ/m2/day)
ABEOKUTA	62.7	4	44.4	31.5	23	192.4	18.5
ABUJA	80	6	44.4	30.6	21.7	181.5	18.9
AKURE	45.2	5	42	30.2	22.4	182.8	17.8
ASABA	46.8	3	48	32.2	22.5	193.2	20
AWKA	48.8	7	42.1	30.8	23.2	189.6	17.6
BAUCHI	66.3	4	47.7	32.1	22.3	192.1	19.9
BENIN	44.2	8	43.1	31.3	2.5	193.9	17.9
BIDA	72.5	5	42.3	30.8	22.8	188	17.7
CALABAR	101.7	8	37.9	29.9	23.7	187.7	15.9
EKET	158.8	10	29.7	28.0	24.2	181.1	12.6
ENUGU	51.1	6	45.5	30.6	21.3	179.8	19.5
GOMBE	39.5	3	47.5	32.1	22.4	192.1	19.8
GUSAU	19.5	3	47.5	32.7	22.8	197.6	19.5
IBADAN	45.8	6	42	30.4	22.6	184.9	17.8
IJEBU ODE	128.1	8	40.8	30	22.7	183.4	17.3
IKEJA	51.4	6	39.2	30.3	23.6	189.4	16.4
IKOM	219.2	9	44	30.9	22.6	187.5	18.5
ILORIN	92.6	7	43.3	30.2	21.8	179.9	18.5
ISEYIN	63.8	6	42.8	29.9	21.7	178.4	18.3
JOS	170.2	7	46.9	28.1	16.9	145.4	21.3
KADUNA	30.1	5	46.6	30.6	20.6	176.1	20

KANO	0	0	51.1	34.1	23.3	206.8	20.8
KATSINA	8	1	55.5	35.3	22.5	209.2	22.4
LAFIA							
LOKOJA	87	7	43.8	31.5	23.3	193.9	18.2
MAIDU	0	0	57.5	37.1	24.3	226.8	22.6
MAKURDI	213.2	7	44.7	30.2	21.3	177.4	19.1
MINNA	12	2	46.3	30.2	20.3	172.6	20
NGURU	13.5	1	55.3	36.5	24.4	224.3	21.9
OGOJA	207.2	7	47	31.9	22.7	193	19.6
ONDO	108.8	8	42.1	30.5	22.9	187.1	17.7
OSHODI	153.5	5	37.6	30.5	24.5	194.8	15.6
OSOGBO	131.5	7	42.9	30.1	21.9	180	18.3
OWERRI	50.7	7	43.8	30.7	22.4	185.4	18.5
PHC	70.2	6	42.3	30.7	23.1	189.2	17.7
POTISKUM	21.1	3	52.1	34.2	22.9	205.5	21.3
SHAKI	80	8	42.3	29.1	20.8	169.2	18.4
SOKOTO	7	1	54.1	35.6	23.9	217.6	21.6
UMUAHIA	125.5	4	40.8	30.3	23.1	187.1	17.2
UYO	148.7	6	36.7	29.8	24.0	188.6	15.4
WARRI	70	9	40.2	31.0	24.3	196.5	16.7
YELWA	36.6	3	43.4	32.0	24.1	200.4	17.9
YOLA	44.8	4	46.4	32.9	24.0	204.5	19
ZARIA	24.8	2	46.9	31.1	21.1	180.7	19.9
OBUDU	99.1	10	44	30.6	22.2	184	18.6
IBI	103.8	7	44.2	30.8	22.2	185.1	18.7
USI-EKITI	83.1	8					

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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