



NIGERIAN METEOROLOGICAL AGENCY

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SUMMARY

The dekad witnessed significant reduction in rainfall activities in parts of the extreme north due to the cessation of rains in the area. The south had good rainfall in the last 10 days of October 2011 with stations at Benin, Warri, Owerri, Uyo, Eket and Calabar recording above 100mm; Calabar had as high as 239.5mm of rainfall. Most parts of the country had normal to surplus rainfall anomalies; however the north eastern tip and few other areas had deficits. Deficit soil moisture conditions prevailed in the extreme north and parts of the north central while the south had normal to surplus. Reports showed that most parts of the north and some parts of the north central experienced hot temperatures (above 32 deg Celsius) while the south and some parts of the north central had mild to warm temperatures (below 32 deg Celsius). The dekad witnessed harvest of maize, cassava, fruity vegetables and yams as the dominant field activity in the south. In the north, harvest of cereal crops like millet, maize and sorghum is expected to continue during the next dekad while some farmers have commenced land preparation for dry farming season.

1.0 RAINFALL TREND

1.1 Rainfall Anomaly

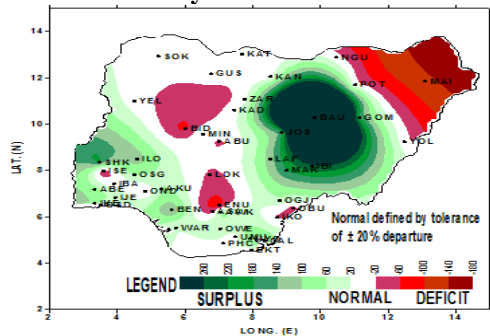


FIG. 1: 3rd DEKAD OF OCTOBER 2011 RAINFALL ANOMALIES (%) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO THE 1971 - 2000 BASE PERIOD DECADEAL MEANS.

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, the north eastern tip of the country as well as areas in and around Yelwa, Lokoja, Bida, Enugu and Iseyin had deficits.

1.1 Rainfall Amounts

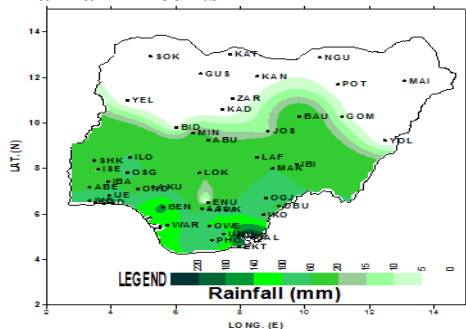


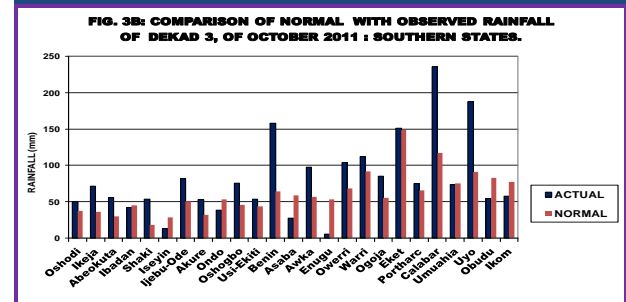
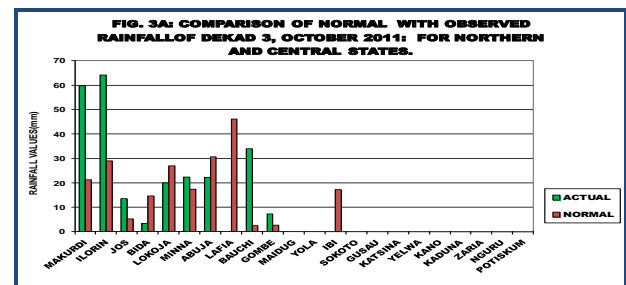
FIG. 2: ACTUAL AMOUNT OF RAINFALL FOR DEKAD 3, OCTOBER 2011

Fig 2 shows the actual rainfall received across the country and reveals that the north and some parts of the north central had between zero and 20mm of rains while

elsewhere in the north central and some parts of the south had between 20mm and 100mm. However, the coastal and few inland areas received over 100mm as stations such as Benin, Warri, Owerri, Uyo, Calabar and Eket had rainfall in excess of 100mm. Supplementary water as irrigation is required in the north and central areas as the rainfall amounts received in these areas were generally inadequate for rainfed crops.

1.2 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 that had rains recorded values above normal rainfall.



1.3 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 8 days. The rainfall distributions in the north and central areas were not favourable for crop performance and therefore did not support field crops that required high spread of rains but favoured drying of farm produce.

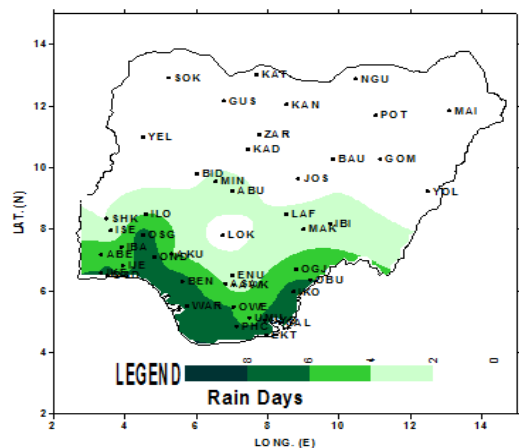


FIG. 4: ACTUAL NUMBER OF RAIN DAYS FOR DEKAD 3, OCTOBER 2011

2.0 SOIL MOISTURE CONDITION

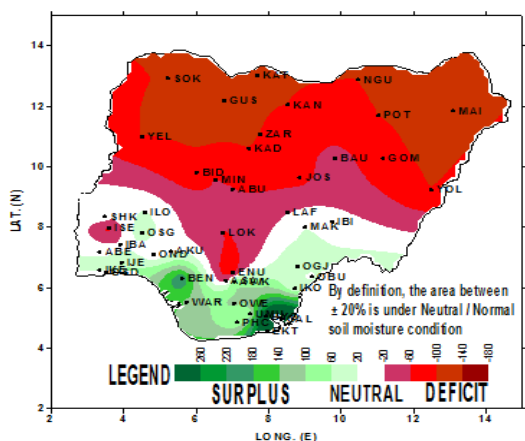


FIG. 5: 3rd DEKAD OF OCTOBER 2011 SOIL MOISTURE INDICES (%) OVER THE COUNTRY.

The decadal distribution of soil moisture across the country is shown in Fig 5 above and indicates that most parts of the south had normal to surplus soil moisture conditions while the north and north central had deficits. Soil moisture across the north was not enough to support crop growth and development. Farmers are therefore advised to supplement with irrigation water.

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 (Yelwa, Sokoto, Gusau, Katsina, Nguru, Potiskum, Maiduguri and Yola) which had warmer than normal temperatures. However areas in and around Jos, Eket and Calabar were colder.

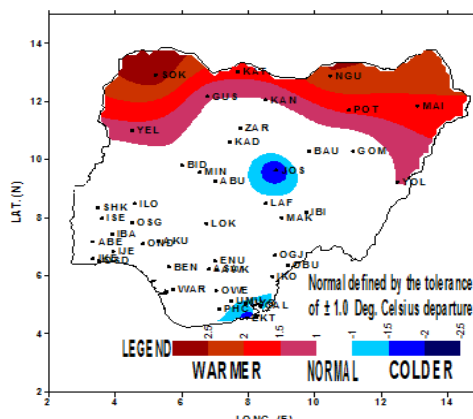


FIG. 6: 3rd DEKAD OF OCTOBER 2011 MEAN MAXIMUM TEMPERATURE ANOMALIES (Deg. C) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO THE 1971 - 2000 BASE PERIOD DECADEAL MEANS.

3.2 Maximum Temperature Values

Fig 7 below depicts the actual mean maximum temperature distribution and it indicates that most parts of the north and central areas experienced hot temperatures (above 32 Deg. C), while the south and some parts of the north central had mild to warm temperatures (below 32 Deg. C). Temperature reports across the south favoured optimum growth and development of crops and livestock performance while in the north it was drying of farm produce.

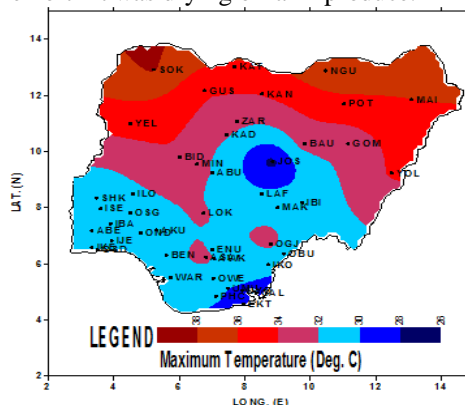


FIG. 7: MEAN MAXIMUM TEMPERATURE FOR DEKAD 3, OCTOBER 2011

4.0 WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 1 (1 TO 10), OF NOVEMBER 2011

4.1 Weather Outlook

The southward movement of the Inter Tropical Discontinuity (ITD) is expected to continue with positions fluctuating between Latitude 10.5 and 12.5 deg. north. The northern and central parts of the country are expected to experience partly cloudy to sunny weather conditions with slight dust haze in reduced visibility in some places. The inland and coastal parts of the country are expected to experience

partly cloudy to cloudy conditions with occasional rainfall/thunderstorm activities.

Maximum temperatures for the north and central states are expected to range between 32°C and 35°C while the minimum temperatures will range from 17°C to 21°C . Maximum temperatures for inland and coastal areas are expected to range from 29°C to 33°C while the minimum temperatures will be between 21°C and 23°C .

4.2 Agricultural Activity/Outlook

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKA

STATION	RAINFALL(mm)	RAINDAY	PET(mm)	TMAX(Deg C)	TMIN(Deg C)	Degree Days	RADIATION (MJ/m ² /day)
ABEOKUTA	55.4	6	50.6	32.0	23.0	215.2	19.1
ABUJA	22.2	3	53.6	32.0	21.5	206.9	20.5
AKURE	52.8	4	52	31.3	21.2	200.8	20.1
ASABA	27.5	4	52.6	32.7	23.1	219	19.7
AWKA	97.9	3	49.4	31.8	23.1	213.7	18.7
BAUCHI	34	2	59.6	32.9	19.0	199.4	23.1
BENIN	157.8	7	49.1	31.2	22.5	207.7	18.7
BIDA	3.4	1	55.7	33.8	22.8	222.2	20.8
CALABAR	235.9	7	42.3	29.4	22.7	199.4	16.3
EKET	151.6	8	33.5	28.2	23.9	198.3	13
ENUGU	5.7	3	50.6	31.7	22.3	208.2	19.3
GOMBE	7.3	1	52.9	32.6	22.2	213	20
GUSAU	0	0	61.9	34.3	19.7	209.5	23.6
IBADAN	41.6	5	48.6	30.8	22.0	203.3	18.7
IJEBU ODE	81.6	5	49.6	31.2	22.3	206.5	19
IKEJA	71.2	6	47.8	31.2	23.0	210	18.2
IKOM	57.5	7	47	30.5	22.0	200.5	18.1
ILORIN	64.2	4	52.1	31.5	21.3	203.2	20
ISEYIN	12.9	2	48.7	30.4	21.3	197	18.9
JOS	13.5	1	52.4	27.4	14.6	144.6	22.3
KADUNA	0	0	58.7	32.2	18.3	191	23.1

KANO	0	0	64	34.1	18.1	200.8	24.8
KATSINA	0	0	66.7	35.7	19.3	215.5	25.1
LAFIA	-	-	-	-	-	-	-
LOKOJA	20	1	50.2	32.1	23.1	215.8	18.9
MAIDUGURI	-	-	-	-	-	-	-
MAKURDI	59.8	3	49.9	31.4	22.2	206.7	19.1
MINNA	22.3	3	53.7	32.4	21.8	209.6	20.4
NGURU	0	0	68.4	37.3	20.6	233.8	25.1
OGOJA	85	5	52.3	32.5	22.9	215.9	19.7
ONDO	38.5	7	46.3	30.7	22.4	203.9	17.8
OSHODI	50	7	48	31.7	23.6	216	18.1
OSOGBO	75.5	7	50.2	30.8	21.1	198	19.5
OWERRI	103.5	6	47.8	30.4	21.7	199.2	18.5
PHC	74.8	7	47	30.5	22.4	204.2	18
POTISKUM	0	0	69.3	35.5	16.8	204.2	26.6
SHAKI	53.5	2	48.1	30.0	20.9	192.4	18.8
SOKOTO	0	0	69.5	38.2	21.7	240.9	25.2
UMUAHIA	73.8	4	45.4	30.1	22.4	200.5	17.5
UYO	187.9	7	42.4	29.7	22.9	202	16.3
WARRI	112.1	7	47.6	31.4	23.5	214.2	17.9
YELWA	0	0	57.7	34.8	22.5	227.5	21.4
YOLA	0	0	54	34.2	23.8	231.4	19.9
ZARIA	0	0	60.1	32.6	18.1	192.3	23.6
OBUDU	54.5	6	49.5	30.6	21.5	199	19.2
USI-EKITI	53.5	6	-	-	-	-	-

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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