

NIGERIAN METEOROLOGICAL AGENCY 33 POPE JOHN PAUL II STREET, MAITAMA DISTRICT, P.M.B. 615, GARKI, ABUJA, NIGERIA

Agrometeorological Bulletin No.23, Dekad 2, August (11 – 20) 2011

SUMMARY

During the dekad, light to moderate rains fell across the country with the southwest witnessing reduced rainfall activities due to the effect of the little dry season (August break). Surplus to normal soil moisture conditions were observed across the country except in parts of the southwest which recorded deficits. Most parts of the country had normal temperatures while warmer than normal temperatures were observed in few areas across the country. However, stations at Jos, Shaki, Iseyin, Eket and Calabar recorded colder than normal temperature. No part of the country had temperatures above 32 Deg C. Harvest of maize, cassava, fruity vegetables and new yams remained the dominant field activity during the dekad.

1.0 RAINFALL TREND





Fig. 1 above shows the rainfall anomaly during the dekad and indicates that deficit anomalies affected most parts of the southwest, parts of the southeast and some parts of the north central (red areas). However, most parts of the north had normal to surplus anomalies which favoured cropland and pastureland growth and development.

1.2 Rainfall Amounts



The rainfall received across the country is shown in Fig2 above and reveals that most stations had substantial rainfall except the southwest which had low rainfall due to the effect of the little dry season. However, areas such as Kaduna, Zaria, Bauchi, Potiskum and Jalingo in the north as well as most stations in the southeast and Niger Delta had high intensity rainfall which resulted to flooding and erosion.



Flooded town at Jalingo in Taraba state after torrential rain

1.3 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE DEKAD

The comparison of the actual rainfall amount with normal rainfall values in some selected stations across the south and the north of the country are shown in *Figs 3A & B* respectively. Figure 3A shows that most stations in the north had above normal rainfall while the south (Fig 3B) had below normal.





1.4 Number of Rain Days

Fig 4 shows the number of rain days across the country and indicates that most parts of the country had 4days of rainfall while the southwest had below 4 days. The rainfall distribution across the north and southeast was generally adequate and favoured rainfed crops; pastures and rangeland while that of the southwest favoured harvest of mature crops.



FIG. 4: A CTUAL NUMBER OF RAIN DAYS FOR DEKAD 2, A UGUST 2011

2.0 SOIL MOISTURE CONDITION

The decadal distribution of soil moisture across the country is shown in *Fig 5* below and indicates that most parts of the country (green areas) had surplus soil moisture conditions that were adequate for rainfed crops, whereas the southwest recorded deficits.



FIG. 5: 2nd DEKAD OF AUGUST 2011 SOIL MOISTURE INDICES (%) OVER THE COUNTRY.

3.0 MAXIMUM TEMPERATURE TREND 3.1 Maximum Temperature Anomaly

Fig 6 shows the trend of maximum temperature anomaly over the country and indicates that most stations across the country were normal. However, stations such as Sokoto, Nguru, Ibi, Yola, Lokoja, Awka and Warri were warmer than normal while Jos, Shaki, Iseyin, Eket and Calabar were colder than normal.



3.2 Maximum Temperature Values

The actual mean maximum temperature distribution is shown in *Fig* 7 below and reveals that no station had temperatures above 32 Deg C and favoured optimum crop development and growth and as well as livestock performance.



FIG. 7: MEAN MAXIMUM TEMPERATURE FOR DEKAD 2, AUGUST 2011

4.0 WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 3 (21 TO 31), OF AUGUST, 2011 4.1 Weather Outlook

The Inter Tropical Discontinuity (ITD) is expected to remain quasi stationary between Latitude **19.0 deg. and 21.0 deg. north**. The moist south westerly winds are expected to continue to dominate most parts of the country.

The north and central states are expected to experience cloudy weather conditions with localized thunderstorm

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activities. The Inland and coastal areas of the country are expected to experience cloudy weather conditions with widespread rain showers.

Maximum temperatures for the north and central states are expected to range from $28^{\circ}C$ to $32^{\circ}C$ while the minimum temperatures will range between $20^{\circ}C$ and $24^{\circ}C$. For the inland and coastal areas, the maximum temperatures are expected to be between $25^{\circ}C$ and $28^{\circ}C$ while the minimum temperatures will range from $21^{\circ}C$ to $24^{\circ}C$ during the period.

Rainfall amounts across the country are predicted to range from **30mm to 300mm**.

4.2 Agricultural Activity/Outlook

Harvesting of staple food crops and fruity vegetables continued to dominate farming activities in most parts of the south and the middle belt while weeding and other farming operations were confined to the northern states.

It is expected that in parts of the south and the middle belt, harvest of **maize**, **cassava**, **vegetables and new yam** will continue. Farmers in the southwest are expected to use this period of the little dry season (August break) to harvest mature crops, weed cassava farmlands and plan for the second cropping season.

		RAI						LAFIA	93.6	7	32.7	28.6	23.3	179.5	13.9
STATIO N	RAIN FALL (mm)	ND AY (no.)	PET (mm)	TMA X	TMIN (oC)	DD (no.)	RAD(MJ/m 2/day)	LOKOJA	0	0	37.4	30.5	23.9	191.7	15.6
ADEOK	0.2	(10.)	(1111)	20.0	22.1	180	2/uuy)	MAIDU	130.9	7	36.2	29.4	22.7	180.7	15.4
ADEUK	9.5	1	40	29.9	22.1	180	17.1	DI	26	4	38	29.3	22.2	177.9	16.2
ABUJA	97.7	7	32.2	27.4	21.9	166.6	14.1	MINNA	24.5	8	38.6	28.9	21.2	170.7	16.7
AKURE	6.4	1	36.4	28.3	21.4	168.6	15.9	NGURU	75.3	7	30.1	30.2	22.6	184.1	16.5
ASABA	36.8	4	39.2	30.3	23	186.1	16.5	OCOLA	124.6	7	27.2	20.2	22.0	170.2	15.0
AWKA	23.7	4	33.7	28.9	23.3	181.1	14.4	OGOJA	134.6	/	37.2	29.3	22.6	179.3	15.9
BAUCHI	304.3	7	35.6	28.3	21.8	170.5	15.5	ONDO	9.2	2	37.1	29.0	22.1	175.3	16
BENIN	56.7	3	36	29.1	22.8	179.4	15.4	OSHODI	5.1	3	34.5	29.6	23.9	187.4	14.5
BIDA	41.9	4	35.9	29.6	23.3	184.7	15.2	0	8.7	3	33.4	27.4	21.6	164.8	14.6
CALAB AR	191.7	10	31.1	27.7	22.9	172.8	13.5	OWERR I	48.9	5	35.1	28.9	22.9	178.8	15
EKET	307	9	24.9	26.8	23.7	172.8	10.8	PHC	15.2	5	35.3	29.3	23.3	182.8	15
ENUGU	106.6	5	37	29.0	22.3	176.4	15.9	РОТ	138	6	39.1	29.6	21.8	176.7	16.8
GOMBE	82.7	5	35.5	27.7	21.1	164.3	15.6	SHAKI	74.7	3	31	25.7	20.4	150.5	14
GUSAU	189.8	7	38.9	28.9	20.9	169	16.9	SOKOT O	70.3	8	39.8	30.2	22.2	182	16.9
IBADAN	25.5	4	35.1	28.3	22.0	171.2	15.2	UMUAH IA	98.3	9	35.2	28.9	22.9	179	15.1
IJEBU	13.2	2	35.7	28.7	22.3	174.7	15.4	UYO	102.9	6	29.6	27.7	23.3	174.9	12.7
IKEJA	1.2	2	36.2	29.8	23.4	186.1	15.3	WARRI	14.3	5	37.5	30.3	23.7	190	15.7
IKOM	105.4	9	34.2	28.4	22.6	174.9	14.7	YELWA	169	5	33.8	29.1	22.8	179.8	14.4
ILORIN	16.3	2	35.9	28.1	21.4	167.2	15.7	YOLA	35.5	6	34.4	30.2	24.0	190.9	14.4
ISEYIN	30.5	5	32.4	26.5	20.8	156.6	14.4	ZARIA	157.2	5	38.8	28.2	20.2	162	17.1
JOS	62.8	9	31.8	23.2	16.8	119.8	15.2	OBUDU	15.2	5	32.3	27.4	21.9	166.4	14.1
KADUN A	129.9	8	34.6	27.3	20.9	161	15.3	IBI	27	3	40.6	30.5	22.5	184.9	17.1
KANO	184	7	38.6	28.6	20.7	166.4	16.9								
KATSIN A	93	6	42	28.8	19.1	159.6	18.6					-	-		•

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

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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