NIGERIAN METEOROLOGICAL AGENCY

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SUMMARY

The 2nd dekad of July witnessed moderate to heavy rains across the country. Most parts of the south and some parts of the north central had rainfall amounts exceeding 100mm with flooding and erosion which submerged farmlands and disrupted vehicular and human traffic. Surplus soil moisture conditions were observed in most parts of the country exception for few areas like Sokoto, Katsina, Nguru, Bida, Yola, Ogoja and Akure that had deficits. Most parts of the country had normal temperatures while warmer than normal temperatures have persisted along the extreme north (Sokoto, Katsina, Nguru, Potiskum, Maiduguri and Yola). Areas in and around Shaki, Iseyin, Jos and Eket were colder than normal. Temperatures below 32 Deg C were recorded in most parts of the country while the extreme north had 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

1.1 Rainfall Anomaly

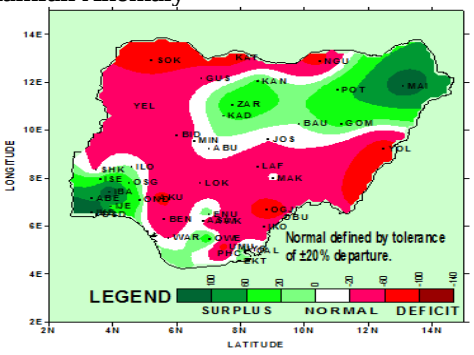

FIG.1: 2ND DEKAD OF JULY, 2011 RAINFALL ANOMALIES(%) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO 1971-2000 BASE PERIOD DEKADAL MEANS.

The rainfall anomalies over the country are shown in ***Fig 1*** above and indicate that deficit rainfall anomalies (red areas) were recorded in most parts of the country. The southwest and extreme northeast extending to Zaria and Kaduna had surpluses (green areas) while other areas were normal.

1.2 Rainfall Amounts

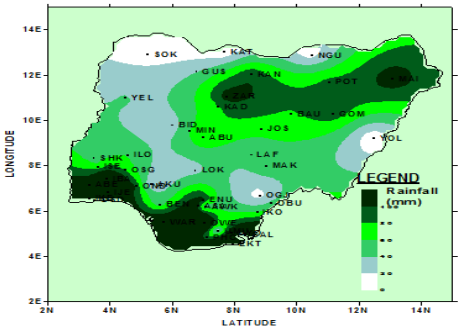

FIG.2: ACTUAL AMOUNT OF RAINFALL FOR DEKAD 2, JULY 2011.

Fig 2 also shows the actual rainfall received across the country and reveals that apart from Sokoto, Katsina, Nguru, Yola, Bida, Ogoja and Akure which had below 30mm; all other stations recorded above such that Owerri, Eket and Ikeja recorded as high as **194.3mm, 257.7mm and 174.6mm** respectively. However, many stations across the south received over 100mm of rainfall with impact of flooding and erosion that submerged farmlands, flooded roads and disrupted traffic flow (see plate1below).

Plate 1: Flooded road in Isolo area of Lagos State.

1.3 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE DEKAD

Figs 3A & B below are the comparison of the actual rainfall amount with normal rainfall values in some selected stations across the south and the north of the country. ***Fig 3A*** shows that most stations in the north except that of northeast which extended to Zaria and Kaduna had below normal rainfall while there were much variability in the south as shown in ***Fig B.***

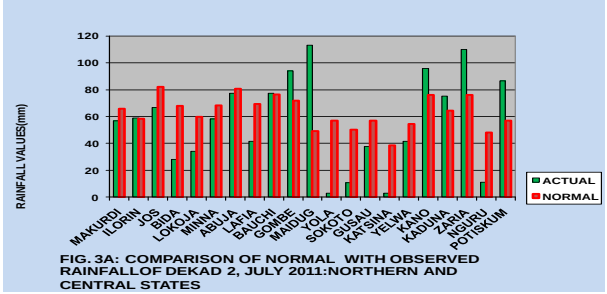

FIG. 3A: COMPARISON OF NORMAL WITH OBSERVED RAINFALLOF DEKAD 2, JULY 2011:NORTHERN AND CENTRAL STATES

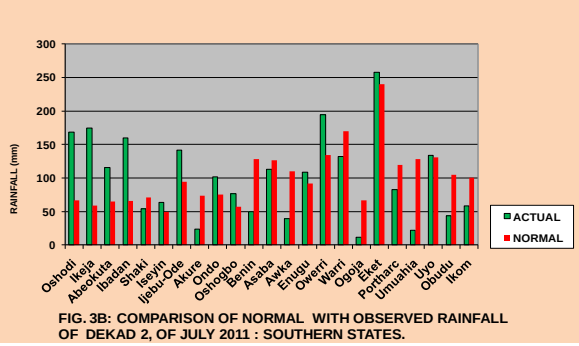

FIG. 3B: COMPARISON OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 2, OF JULY 2011 : SOUTHERN STATES.

1.4 Number of Rain Days

Fig 4 shows the number of rain days across the country and reveals that the Niger Delta area had over 6 days of rainfall while other areas had between 3 and 6 raindays except Sokoto, Katsina, Nguru, Gusau, Yola and Shaki that had 2 or less raindays. The rainfall distribution was favourable for crop development and growth and supported crops that required high spread of rains.

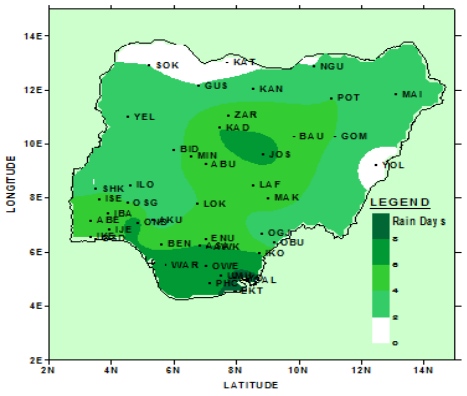

FIG.4: ACTUAL NUMBER OF RAIN DAYS FOR DEKAD 2, JULY 2011.

2.0 SOIL MOISTURE CONDITION

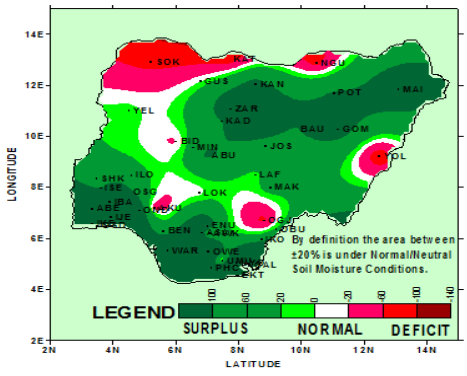

FIG.5 2ND DEKAD OF JULY, 2011 SOIL MOISTURE INDICES.

The decadal distribution of soil moisture across the country is shown in ***Fig* 5** and indicates that most parts of the country (green areas) had surplus soil moisture conditions while areas such as Sokoto, Katsina, Nguru, Bida, Yola, Ogoja and Akure recorded deficits. The soil moisture across the country supported crop growth and development and other moisture loving animals. It made harvesting of root crops easier.

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

The trend of maximum temperature anomaly is shown in ***Fig 6*** below and indicates that most parts of the country were normal. However, warmer than normal temperatures have persisted in areas such as Sokoto, Katsina, Nguru, Potiskum, Maiduguri and Yola while areas in and around Shaki, Iseyin, Jos and Eket were colder.

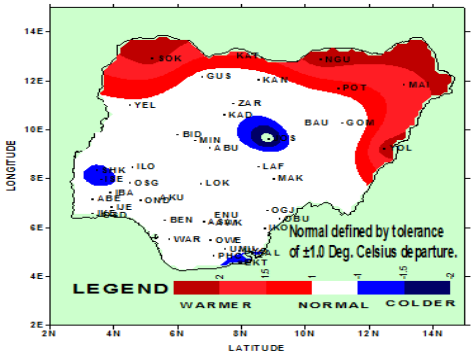

FIG.6: 2ND DEKAD OF JULY, 2011 MEAN MAXIMUM TEMPERATURE ANOMLIES(Deg.C) OVER THE COUNTRY. ANOMALIES ARE COMPUTED WITH RESPECT TO 1971-2000 BASE PERIOD DEKADAL MEANS.

3.2 Maximum Temperature Values

The actual mean maximum temperature distribution is shown in ***Fig 7*** below and reveals that most stations across the country recorded temperatures below ***32 Deg C*** while the extreme north including Sokoto, Katsina, Nguru, Potiskum, Maiduguri and Yola recorded temperatures above ***32 Deg C.*** The dekad had temperatures that favoured crop development and growth and as well as livestock performance**.**

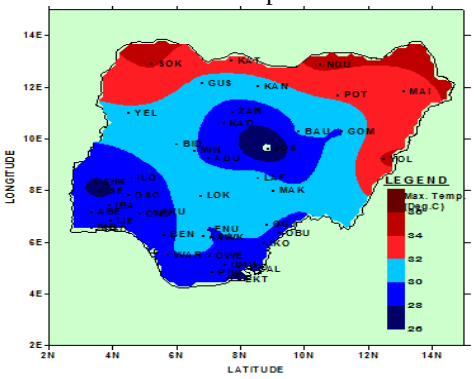

FIG.7: MEAN MAXIMUM TEMPERATURE FOR DEKAD 2, JULY 2011.

4.0 WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 3 (21 TO 31), OF JULY 2011

4.1 Weather Outlook

The moist south westerly winds are expected to continue to dominate the country. The Inter Tropical Discontinuity (ITD) will fluctuate between Latitude

19.5 deg. and 20.5 deg. north. This is expected to lead to more convective activities across the country.

The extreme north and central states are expected to experience cloudy weather conditions with rain showers and thundery activities.

The inland and the coastal areas of the south are expected to be cloudy with widespread rainfall activities. However the south western part of the country is expected to experience the little dry season (August break).

Maximum temperatures for the north and central states are expected to range between ***26^0C and 31^0C*** while the minimum temperatures will be between ***21^0C and 24^0C***. Maximum temperatures for inland and coastal areas are expected to range between ***27^0C and 29^0C*** while the minimum temperatures will be from ***20^0C to 25^0C***

Rains are expected to spread across the country with exception of south western areas where rainfall amount will be reduced. Rainfall values ranging from 20mm to 230mm are expected.

4.2 Agricultural Activity/Outlook

Harvesting of maize and fruity vegetables was in progress in parts of the south and north central.

It is expected that in parts of the south and north central, harvest of maize, cassava, vegetables and new yam will continue. Farmers in the north are advised to weed their farmlands as more rains are being expected which will aid good yields.

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

STATIONS	TOTAL RAINFAL (mm)	TOTAL RAIN DAYS	EVAPOTRANSPIRATION (mm)	MEAN MAXIMUM TEMP (^{O}C)	MEAN MINIMUM TEMP (^{O}C)	DEGREE DAYS (MAIZE)	MEAN RADIATION (MJ/m^2/day)
ABEOKUTA	115.7	6	35.9	29.3	22.2	177.8	15.4
ABUJA	77.5	5	36.5	29.8	22.5	181.8	15.5
AKURE	23.5	3	36.5	29.1	21.7	173.7	15.7
ASABA	113.1	6	39.4	31	22.8	189	16.5
AWKA	39.3	6	37.8	30.0	22.2	181	16.1
BAUCHI	77.2	5	39.2	30.3	21.7	180.1	16.7
BENIN	49.2	5	34.9	29.5	22.9	182.1	14.8
BIDA	28.2	3	37.4	30.8	23.4	190.9	15.6
CALABAR							
EKET	257.7	10	23.6	26.9	23.7	172.9	10.2
ENUGU	108.7	6	37.6	29.9	22.3	180.8	16
GOMBE	93.9	4	37.4	29.8	21.9	178.5	15.9
GUSAU	37.6	2	39.3	31.5	23.1	192.9	16.4
IBADAN	159.7	5	35.2	28.7	21.8	172.4	15.2
IJEBU ODE	141.8	5	34.7	28.9	22.1	174.8	14.9
IKEJA	174.6	5	33.2	29.0	23.0	179.6	14.1
IKOM	57.9	6	35.8	29.7	22.9	183	15.2
ILORIN	59	3	35.9	29.2	21.9	175.6	15.4
ISEYIN	63.4	6	33	27.4	21.1	162.5	14.6
JOS	66.7	7	35.9	25.4	16.8	130.7	16.8
KADUNA	75.1	6	38.6	29.1	20.4	167.2	16.8
KANO	95.9	3	41.2	31.3	22.0	186.6	17.3
KATSINA	3	1	46.5	32.9	21.1	189.9	19.5
LAFIA	41.5	4	37.5	31.2	23.7	194.7	15.6
LOKOJA	34.1	4	37.5	31.1	23.8	194.4	15.6
MAIDUGURI	113.3	4	43.7	33.4	23.5	204.3	17.9
MAKURDI	56.9	5	39.5	30.6	22.2	184	16.7
MINNA	58.1	5	39.8	30.1	21.3	177.2	17.1
NGURU	11	2	46.7	34.5	23.5	210	18.9
OGOJA	11.8	3	39.4	30.8	22.5	186.4	16.6
ONDO	101.2	7	33.9	28.4	21.9	171.6	14.7
OSHODI	168.3	5	31.4	28.7	23.3	180.3	13.4
OSOGBO	76.5	4	34.6	28.4	21.6	170	15
OWERRI	194.3	7	36.5	29.7	22.3	180.3	15.6
PHC	82.6	6	34	29.2	22.8	180	14.5
POTISKUM	86.4	4	41.9	32.4	23.2	198.2	17.3
SHAKI	54.2	2	33.8	27.8	21.1	164.5	14.8
SOKOTO	10.8	2	43.6	34.3	24.7	215.3	17.5
UMUAHIA	21.4	6	34.4	29.2	22.8	179.8	14.7
UYO	134.1	9	32	28.6	22.9	177.1	13.7
WARRI	132.1	8	34.1	29.9	23.8	188.8	14.3
YELWA	41.4	3	37.6	31.7	24.4	200.2	15.4
YOLA	2.8	1	42.9	34.3	25.3	217.9	17
ZARIA	110	5	39.2	29.1	20.2	166.6	17.1
OBUDU	43.8	3	34.4	28.8	22.2	175.2	14.8
USI-EKITI	152.3	3	-	-	-	-	-

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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