NIGERIAN METEOROLOGICAL AGENCY

**NATIONAL WEATHER FORECASTING AND CLIMATE RESEARCH CENTRE,
BILL CLINTON DRIVE, NNAMDI AZIKIWE INTERNATIONAL
AIRPORT, P.M.B. 615, GARKI, ABUJA, NIGERIA**

Agrometeorological Bulletin No.18, Dekad 3, JUNE (21 –30) 2015

ISSN: 2315-9790

SUMMARY

The 3rd dekad of June shows deficit rainfall in part of the northeast (Bauchi, Gombe and Potiskum) and the central part of the country especially Abuja and Lokoja. The extreme north recorded surplus rainfall. The relative position of the Inter-Tropical Discontinuity (ITD) was between between latitude 15.5 and 16°N. ***The highest rainfall amount for the dekad was recorded over Eket with 431.2mm in 7 rain-days, followed by Owerri with 147.4mm in 7 rain-days and Makurdi with 99.6mm in 3 rain-days.*** The country experienced normal maximum temperature anomalies in the north and colder than normal temperature anomaly over the south.

1.0 RAINFALL PATTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

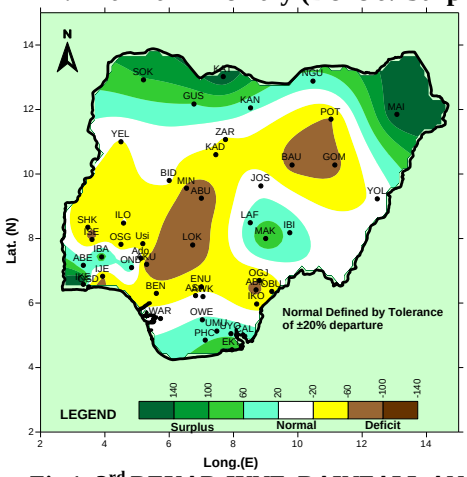

Fig.1: 3rd DEKAD JUNE, RAINFALL ANOMALIES

The 3rd dekad of June, 2015 shows surplus rainfall over the extreme north except for Potiskum, Gombe and Bauchi that recorded deficit rainfall. The central part of the country is still experiencing deficit particularly Abuja and Lokoja. However, Makurdi is showing signs of recovery from the prolong deficit. Mild to moderate deficit still persist in the in the southwest and the southeast. Lagos and Eket recorded surplus rainfall.

Rainfall Amounts

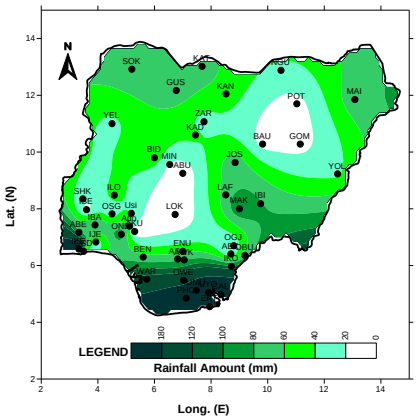

Fig.2: 3rd DEKAD JUNE, RAINFALL AMOUNT

The actual rainfall amount for the 3rd dekad of June, 2015 as shown in Fig.2 shows an improvement of rainfall spread over the north. ***The highest rainfall amount for the dekad was recorded over Eket with 431.2mm in 7 rain-days, followed by Owerri with 147.4mm in 7 rain-days and Makurdi with 99.6mm in 3 rain-days.***

1.2 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE 3rd DEKAD OF JUNE, 2015

The charts below shows the comparison of the actual rainfall amounts measured and normal/long term averages during the dekad is shown in ***Fig.3A and Fig.3B***. Most stations in the north are normal to above normal except for Bauchi, Potiskum, Gombe Abuja and Lokoja that recorded below normal rainfall. Stations in the south recorded below normal rainfall except Lagos, Port-Harcourt and Eket that recorded above normal rainfall.

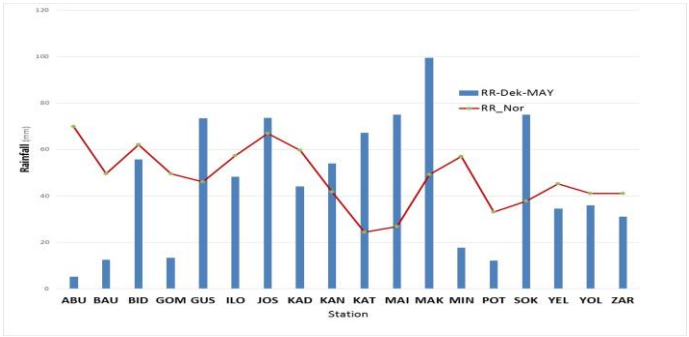

Fig.3A Comparison of Normal with Rainfall in the Northern part of Nigeria

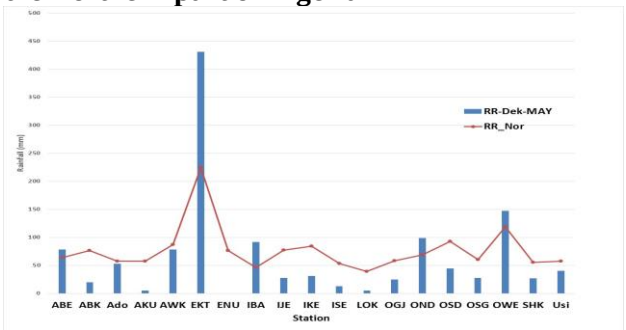

Fig.3A Comparison of Normal with Rainfall in the Southern part of Nigeria

1.3 Number of Rain Days.

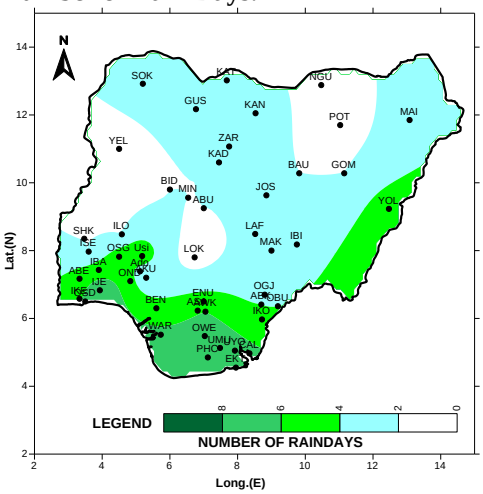

Fig.4: NUMBER OF RAIN DAYS

The rain-days distribution over the country is shown in ***Fig.4*** above and it indicated that rainfall distribution in the country varies from 1 to 8 rain-days in the stations that recorded rain.

2.0 SOIL MOISTURE CONDITION

The Soil moisture condition over the north shows an improvement except Nguru, Potiskum, Bauchi and Gombe that is still experiencing deficit soil moisture. In the central part of the country Abuja, Lokoja and Ilorin are still under deficit soil moisture. The soil moisture indices over the south shows surplus or wet conditions as shown in Fig.5 below

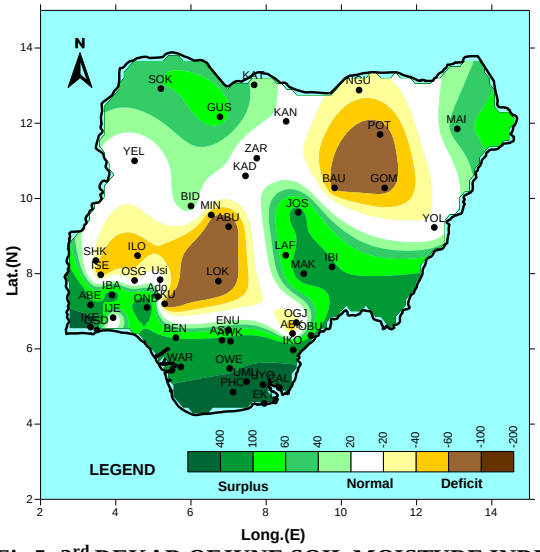

Fig.5: 3rd DEKAD OFJUNE SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

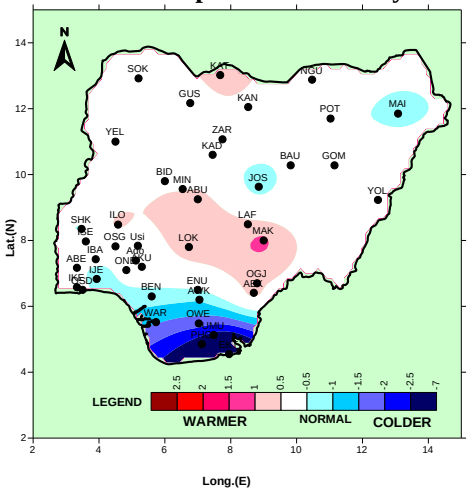

Fig.6: Maximum Temperature Anomaly.

The maximum temperature anomaly analysis for 3rd dekad of June, 2015 shows a normal condition over the north except for Katsina, Abuja, Lokoja, Makurdi and Ilorin with warmer than normal condition. The south show normal to colder than normal temperature

3.2 Maximum Temperature Values.

The actual mean maximum temperature distribution across the country for the 3rd dekad of June 2015, is shown in ***Fig.7*** below and with the extreme north recording maximum temperatures of ***36^0C*** and above, the central states recorded ***28^0C to 32^0C*** except Jos that recorded 26.9***^{0}C***. Most parts of the South recorded ***28^0C to 32^0C*** maximum temperature values. Katsina recorded the highest maximum temperature value of ***36.7^0C while the lowest temperature was recorded over Jos with 25.5^0C.***

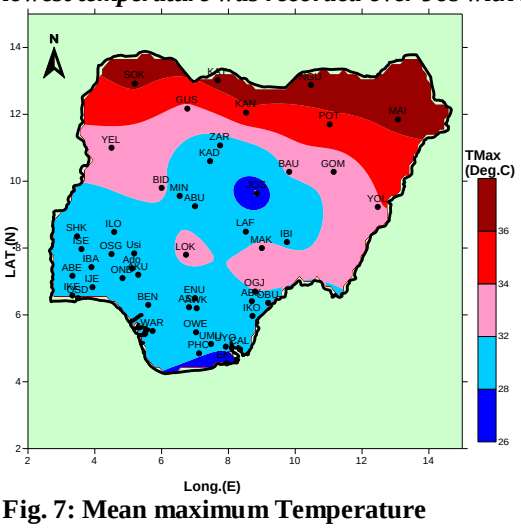

Fig. 7: Mean maximum Temperature

WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 1 (01 TO 10), OF JULY, 2015

4.1 Weather Outlook

The position of Inter Tropical Discontinuity (ITD) is likely to fluctuate between latitudes 17degN and 119degN. The northern part of the country is expected to be cloudy with thundery activities; the central part is expected to experience cloudy and thundery conditions. The inland and coastal areas of the South are likely to experience cloudy weather conditions intermitted rainfall.

The northern and the central states are expected to have mean maximum temperatures of the range 26 ^{O}C - 36^{0}C, while the mean minimum temperatures will lie between 20^{O}C and 26^{O}C. The mean maximum temperatures over the inland and coastal areas of the South are expected to be between 28^{O}C and 32 ^{O}C, while the mean minimum temperatures will range from 20^{O}C to 24^{O}C.

4.2 Agricultural Activity/Outlook

Planting and land preparation will continue over the Northern states, while weeding and fertilizer application is expected to continue in the central state. In the South Harvest of new corn, vegetables and cassava is expected to continue. **For more information please refer to the 2015 SRP and consult the nearest ADP or Ministry of Agriculture.**

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	DD	RADIATION
ABEOK	77.9	5	36.3	30.9	23.9	193.8	15.1
ABAKALIKI	19.8	4	39	31.6	23.6	195.7	16.2
ABUJA	5.1	2	37.8	31.6	22.7	190.3	15.9
AWKA	78	6	34.4	30.0	23.7	188.4	14.4
BAUCHI	12.4	2	41.6	32.6	23.4	200	17.1
BIDA	55.8	2	39.3	32.3	24.3	202.9	16.1
EKET	431.2	7	35.1	27.2	19.7	154.4	15.7
GOMBE	13.3	2	41.4	32.5	23.2	198.5	17.1
GUSAU	73.5	3	42.7	33.6	23.9	207.9	17.3
IJEBU	27.4	7	30.7	28.9	23.6	182.1	13
IKEJA	31	5	32	29.9	20.6	189.0	13.5
ISEYIN	12.6	2	36.4	29.6	22.2	178.9	15.6
JOS	73.6	3	33.1	25.5	18.3	139.1	15.2
KADUNA	44	2	37.5	29.9	21.8	178.5	16
KANO	54	3	47.6	35.7	24.3	220	18.9
KATSINA	67.2	2	49.1	36.7	24.8	227.5	19.3
MAIDU	75	3	48.5	36.5	25.4	229.5	19
MAKURDI	99.6	3	41.2	32.7	24.0	203.5	16.8
MINNA	17.7	2	39.8	31.4	22.7	190.2	16.7
OSHODI	44.7	7	32.1	29.8	24.2	189.8	13.4
OSOGBO	27.3	5	37.7	29.7	21.6	176.4	16.2
OWERRI	147.4	7	35.4	29.2	22.1	176.7	15.2
POT	12.1	1	47.3	35.5	24.3	219.2	18.8
SHAKI	26.5	2	36.7	29.8	22.3	180.4	15.6
SOKOTO	75	3	47	36.4	25.3	228.4	18.4
YELWA	34.5	1	38.7	33.1	25.7	212.4	15.6
YOLA	35.9	5	41.4	33.9	25.3	215.8	16.6
ZARIA	31.1	3	39.2	30.8	22.1	184.5	16.6
USI-EKITI	39.9	6	39.8	29.6	20.5	170.5	17.3
ADO-EKITI	53.1	3	36.5	29.4	21.9	176.6	15.6
ONDO	99	5	36.4	29.7	22.3	179.6	15.5
ILLORIN	48.2	2	40.6	31.2	22.2	186.9	17.1
LOKOJA	5.1	1	39.6	32.6	24.6	205.9	16.1

Note:
Rainfall (mm)
PET = Potential Evapotranspiration (mm/decade)
TMAX = Maximum Temperature (^{O}C)
TMIN = Minimum Temperature (^{O}C)
GDD = Growing Degree Day (day)
RAD = Radiation (MJ/m^{2}/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***