

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.16, Dekad 1, JUNE (1 –10) 2015

ISSN: 2315-9790

SUMMARY

The 1st dekad of June shows the establishment of rainfall in most parts of the country except the extreme northern states of Sokoto, Katsina, Kano, Jigawa, Yobe and Borno states. Deficit rainfall anomaly was recorded over Makurdi, Lafia, Jos and Kano. The relative position of the Inter-Tropical Discontinuity (ITD) was between between latitude 13.5 and 14°N. **The highest rainfall amount for the dekad was recorded over Eket with 666.8mm in 8 rain-days, followed by Ondo with 172.9mm in 7 rain-days and Asaba with 161.7mm in 4 rain-days.** The country experienced normal to warmer than normal maximum temperature anomalies, except Eket, Abuja, and Gombe which had colder than normal maximum temperature anomalies.

1.0 RAINFALL PATTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

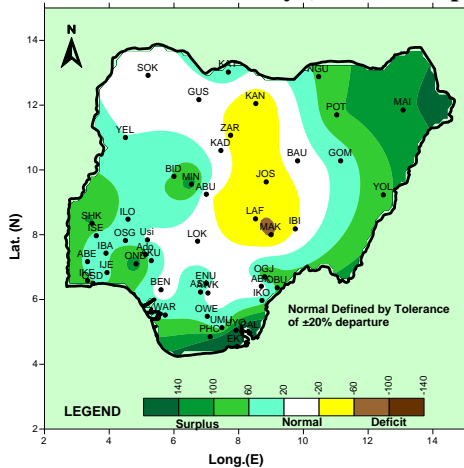


Fig.1: 1st DEKAD JUNE, RAINFALL ANOMALIES

Fig.1 above indicates a recovery from the deficit experienced during the last dekad. The country recorded normal to surplus rainfall anomalies in most stations except Makurdi, Jos, Zaria and Kano that had deficit. Rainfall Onset for the farming season has established over the country except the extreme northern states of Sokoto, Katsina, Yobe and Borno states.

Rainfall Amounts

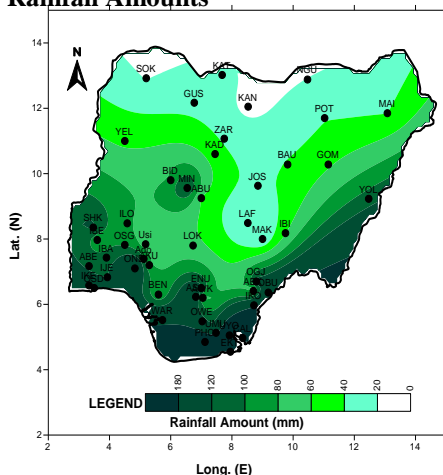


Fig.2: 1st DEKAD JUNE, RAINFALL AMOUNT

The actual rainfall amount for the 1st dekad of June, 2015 as shown in Fig.2 above indicates better spread. **The highest rainfall amount for the dekad was recorded over Eket with 666.8mm in 8 rain-days, followed by Ondo with 172.9mm in 7 rain-days and Asaba with 161.7mm in 4 rain-days.**

1.2 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE 1st 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 except for Makurdi, Lafia, Kano and Jos that recorded below normal rainfall. Stations in the south recorded normal rainfall except Eket that recorded above normal rainfall.

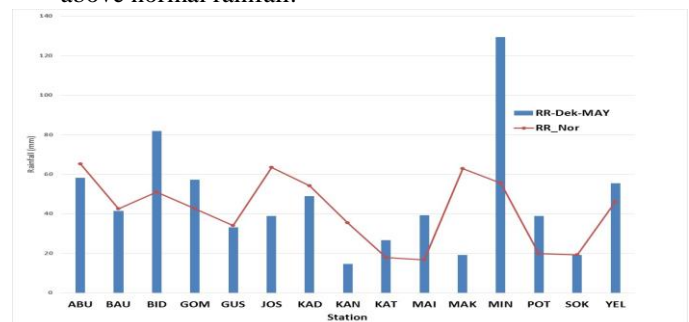


Fig.3A Comparison of Normal with Rainfall in the Northern part of Nigeria

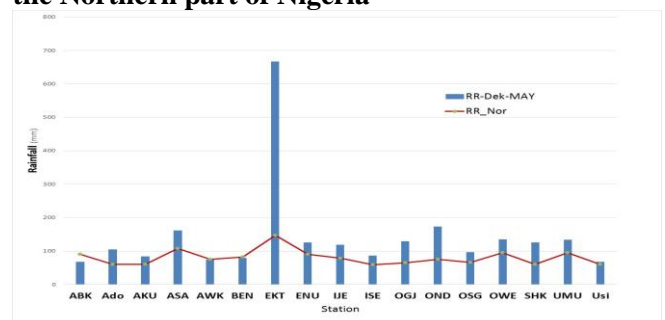


Fig.3A Comparison of Normal with Rainfall in the Southern part of Nigeria

1.3 Number of Rain Days.

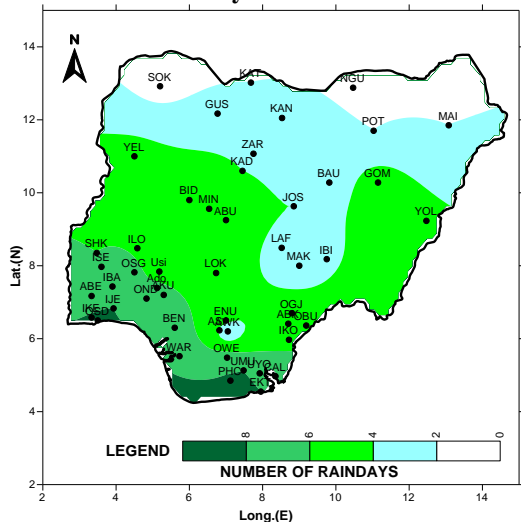


Fig.4: NUMBER OF RAIN DAYS

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 country has recovered from the extreme dryness recorded since the beginning of the raining season. Analysis shows that most stations in the country had normal to surplus soil moisture in the 1st dekad of June, 2015. However, Sokoto, Katsina, Kano, Makurdi and Nguru still show deficit soil moisture as shown in *Fig 5* below.

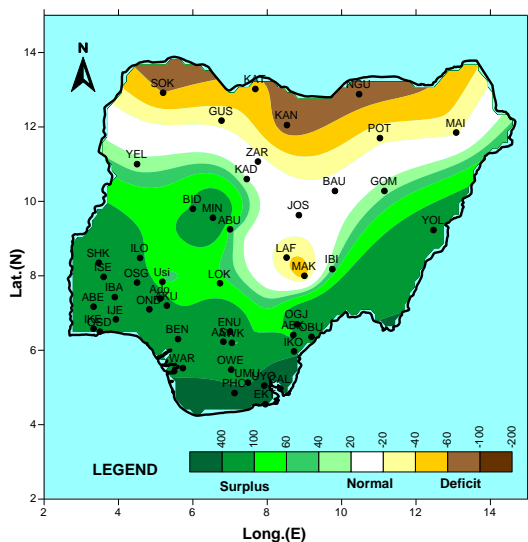


Fig.5: 2ND DEKAD OF MAY SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

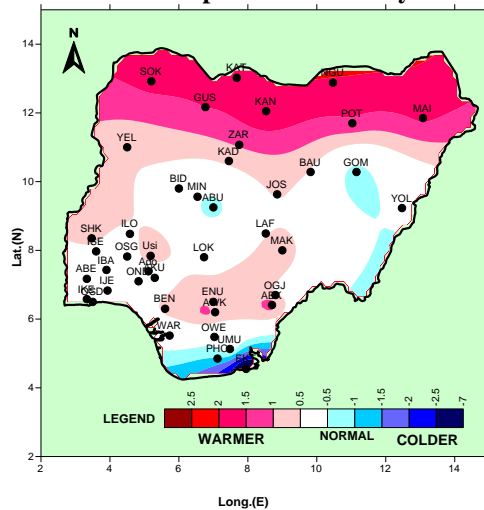


Fig.6: Maximum Temperature Anomaly.

The maximum temperature anomaly analysis for the 1st dekad of June, 2015 shows a warmer than normal condition over the country except Abuja, Eket, Gombe and Port-Harcourt that shows colder than normal maximum temperature conditions as shown in *Fig. 6* above.

3.2 Maximum Temperature Values.

The actual mean maximum temperature distribution across the country is depicted in *Fig.7* below and it shows that the extreme north recorded maximum temperatures of 36°C and above, the central states recorded 28°C to 32°C except Jos that recorded 26.9°C . Most parts of the South recorded 28°C to 32°C maximum temperature values. Maiduguri recorded the highest value of 38.7°C while the lowest temperature was recorded over Jos with 26.9°C .

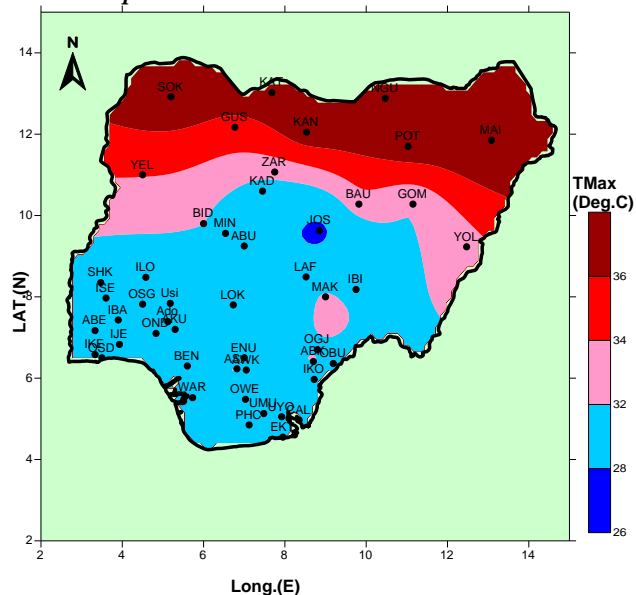


Fig. 7: Mean maximum Temperature

WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 2 (11 TO 20), OF JUNE, 2015

4.1 Weather Outlook

The position of Inter Tropical Discontinuity (ITD) is likely to fluctuate between latitudes 15.5degN and 16degN. 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 widespread rainfall.

The northern and the central states are expected to have mean maximum temperatures of the range 28 °C - 38°C, while the mean minimum temperatures will lie between 22°C and 27°C. The mean maximum temperatures over

the inland and coastal areas of the South are expected to be between 30°C and 32 °C, while the mean minimum temperatures will range from 20°C to 24°C.

4.2 Agricultural Activity/Outlook

Planting and land preparation will continue over the Northern states, while planting of cereal crops and tubers such as maize and yam is expected to continue in the central parts of the country. In the South weeding and fertilizer application 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
ABAKALIKI	67.6	5	41.9	32.1	22.9	195	17.4
ABUJA	58.1	5	39.1	30	21.4	177	16.8
AWKA	74.8	2	40.1	31.8	23.5	196.2	16.6
BAUCHI	41.4	3	44.9	33.4	22.7	200.2	18.4
BENIN	79.4	7	36.4	31.2	24.3	197.1	15
BIDA	81.9	5	40.4	32.1	23.5	197.7	16.7
EKET	666.8	8	39.7	27.8	18.2	149.9	17.9
GOMBE	57.3	5	43.3	32.1	21.9	190	18.1
GUSAU	33.2	3	46	35.3	24.7	219.7	18.3
IJEBU	118.5	8	33.2	29.7	23.6	186.4	14
ISEYIN	86.2	7	38.2	29.9	21.7	177.9	16.3
JOS	38.8	4	37.7	26.9	17.7	142.6	17.2
KADUNA	49	4	40.9	31.1	21.7	184	17.3
KANO	14.6	3	50.7	37.4	25.2	232.9	19.7
KATSINA	26.7	2	52.5	37.5	24.0	227.3	20.7
MAIDU	39.2	2	53	38.7	25.6	241.4	20.4
MAKURDI	19.2	3	42.1	32.3	23.0	196.3	17.4
MINNA	129.5	6	37	30.6	22.3	184.3	15.6
OGOJA	128.9	5	41	31.9	23.2	195.3	17
OSHODI							
OSOGBO	97.1	7	38.1	29.7	21.5	176.1	16.4
OWERRI	135.6	7	38.7	30.6	22.6	186.1	16.3
POT	38.9	2	52.1	37.4	24.4	229.4	20.4
SHAKI	125.5	6	40.1	30.6	21.6	180.9	17.1
SOKOTO	19.2	1	49	37.9	26.7	242.7	18.8
UMUAHIA	134.3	8	39.2	31.0	22.9	189.2	16.4
YELWA	55.4	5	43.2	34.1	24.6	213.3	17.4
USI-EKITI	67.3	4	42.6	30.7	20.5	176.2	18.3
ADO-EKITI	105.1	7	42	29.7	21.2	181.5	17.9
ENUGU	126.1	5	39	31.3	23.3	192.6	16.3
ONDO	172.9	7	38	30.3	22.4	183.7	16.1
ASABA	161.7	4	43.6	32.2	22.3	192.5	18.2
AKURE	83.6	7	37.1	29.7	21.9	178	15.9

Note:

Rainfall (mm)

PET = Potential Evapotranspiration (mm/decade)

TMAX = Maximum Temperature (°C)

TMIN = Minimum Temperature (°C)

GDD = Growing Degree Day (day)

RAD = Radiation (MJ/m²/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