



## Agrometeorological Bulletin No.15, Dekad 3, MAY (21 –31) 2015

ISSN: 2315-9790

### SUMMARY

The 3<sup>rd</sup> dekad of May shows that Onset of rainfall is still being delayed in the north, while the central states is just experiencing its onset due to the effect of the strong El-Niño on the country. Deficit rainfall anomaly still persist over the north and parts of the central states. The dekad shows that the Inter-Tropical Discontinuity (ITD) oscillates between latitude 14.5°N to 15.5°N, deficit Soil moisture condition continue to persist over the north. The highest rainfall amount was recorded over Eket with 313mm in 9 rain-days, followed by Abakaliki with 202.7mm in 4 rain-days and Eket with 167.7mm in 5 rain-day. The country experienced warmer than normal maximum temperature anomalies, except Eket, Abuja, Ekiti and Ogoja which had colder than normal maximum temperature anomalies. The delayed onset as predicted in the 2015 SRP is evident with most part experiencing late onset thereby delaying preparation for the new rainy season in the northern part of the country, planting of cereal and tuber crops is expected to start in the central states of the country. In the South weeding and fertilizer application is expected to continue.

### 1.0 RAINFALL PATTERN

#### 1.1 Rainfall Anomaly (Deficit / Surplus)

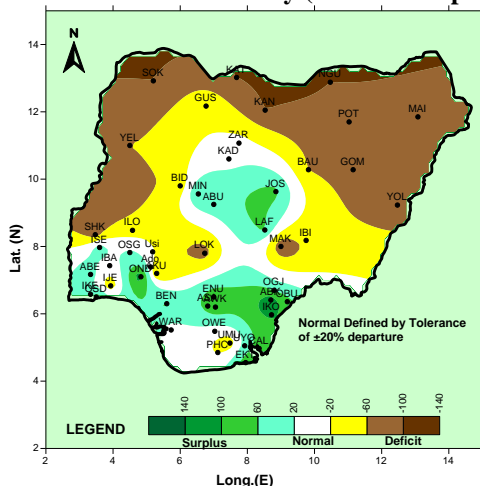


Fig.1: 3RD DEKAD MAY, RAINFALL ANOMALIES

Fig.1 above indicates the strong effect of El-Niño over the Northern part of the country with deficit rainfall being experienced. The south and central states are beginning to experience mild to moderate surplus rainfall which is good for crops at various growth stages.

#### Rainfall

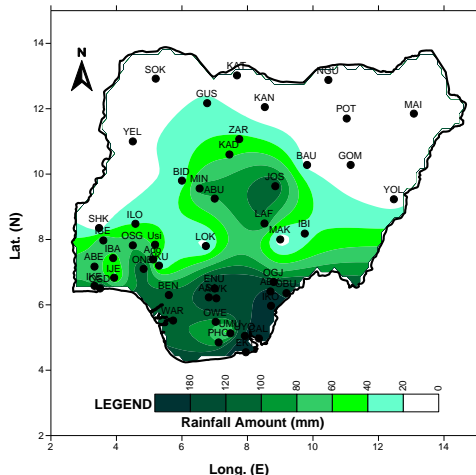


Fig.2: 2ND DEKAD MAY, RAINFALL AMOUNT

Fig.2 above highlights the actual rainfall amount and it indicates better spread. The highest rainfall amount was recorded over Eket with 313mm in 9 rain-days, followed by Abakaliki with 202.7mm in 4 rain-days and Eket with 167.7mm in 5 rain-days.

#### 1.2 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE 3RD DEKAD OF MAY

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 below normal except for Abuja, Minna, Lafia and Jos that recorded above normal rainfall. Stations in the south recorded normal to below normal rainfall except Abakiliki, Awka, Eket, Enugu and Ondo that had above normal rainfall.

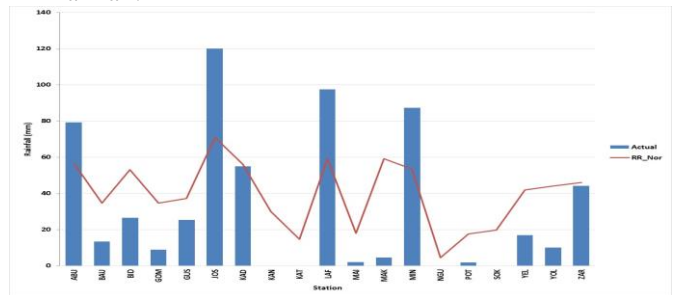


Fig.3A Comparison of Normal with Rainfall in the Northern part of Nigeria

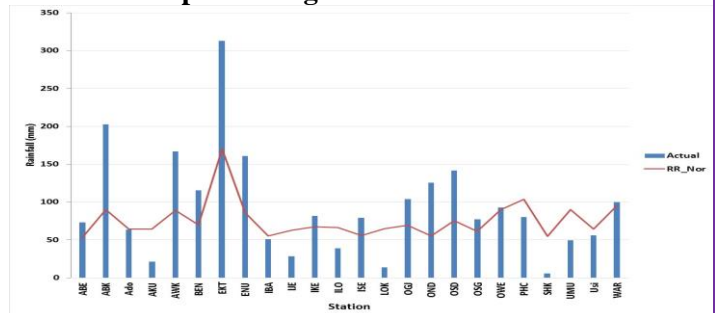


Fig.3B Comparison of Normal with Rainfall in the Southern part of Nigeria

### 1.3 Number of Rain Days.

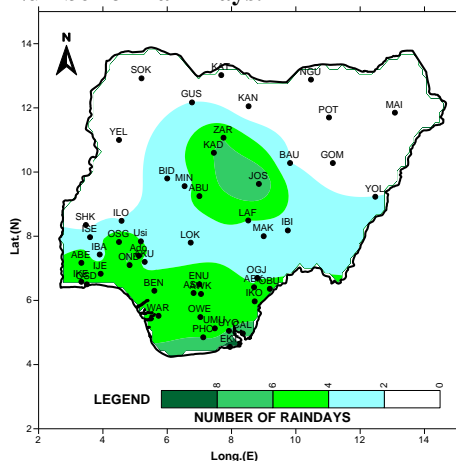


Fig.4: NUMBER OF RAIN DAYS

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

Fig.5 below highlights the soil moisture indices across the country and it showed that the Northern part of the country had deficit soil moisture conditions, while except the southern parts of the country which showed neutral to surplus soil moisture conditions.

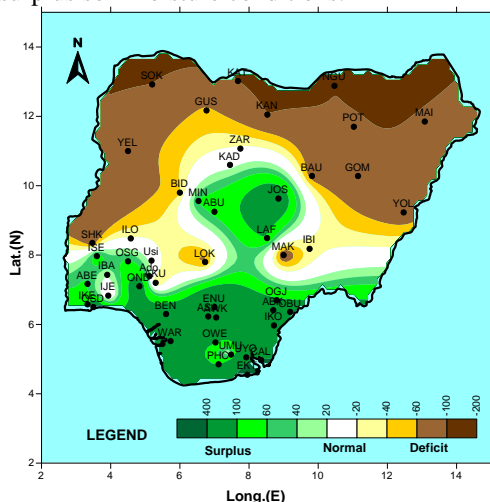


Fig.5: 2ND DEKAD OF MAY SOIL MOISTURE INDEX (SMI)

### 3.0 MAXIMUM TEMPERATURE TREND

#### 3.1 Maximum Temperature Anomaly

Fig.6 below indicates the maximum temperatures anomalies over the country and it indicated that most parts of the country had warmer than normal maximum temperature anomalies, except Eket, Abuja, Ekiti and Ogoja which had colder than normal maximum temperature anomalies

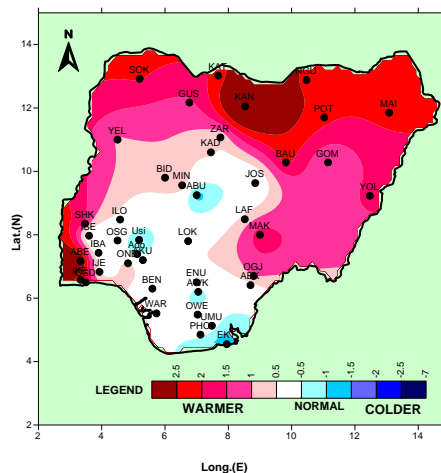


Fig.6: Maximum Temperature Anomaly.

#### 3.2 Maximum Temperature Values.

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 40°C and above, the central states recorded 34°C and above except Jos, Abuja, Ilorin and Lokoja. Most parts of the South recorded 30°C to 34°C maximum temperature values. Nguru recorded the highest value of 42.3°C while the lowest temperature was recorded over Jos with 27.9°C.

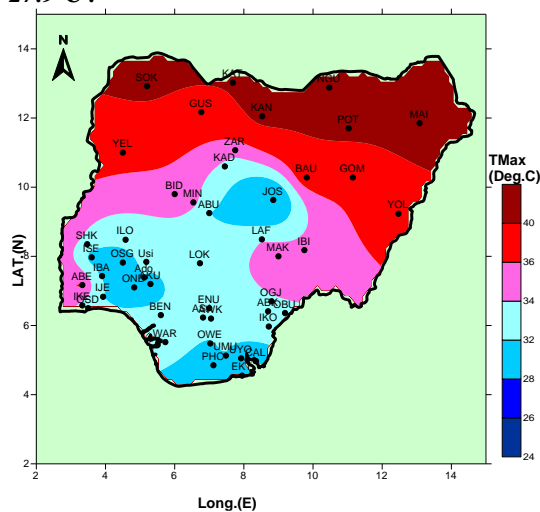


Fig. 7: Mean maximum Temperature

### WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 1 (01 TO 10), 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 partly cloudy; 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 32 °C - 40 °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 34 °C, while the mean minimum temperatures will range from 20 °C to 24 °C.

Preparation for the new rainy season is expected to continue in the northern part of the country as the rainfall onset is gradually being established, 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.**

## 4.2 Agricultural Activity/Outlook

**TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD**

STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	DD	RADIATION
ABEOK	73.3	5	44.4	36.4	27.4	230.7	17.8
ABAKALIKI	202.7	4	49.5	33.5	23.6	225.9	18.4
ABUJA	79.3	5	47.1	32	22.5	212.1	17.8
AKURE	21.2	3	46.9	31.4	21.9	205.3	17.9
AWKA	166.7	5	46.8	32.5	23.4	219.6	17.5
BAUCHI	13.4	2	59.1	38.0	24.9	258.2	20.9
BENIN	115.2	6	44.9	32.3	24.1	22.2	16.7
BIDA	26.6	3	50.8	35.1	25.0	242.4	18.4
EKET	313	9	45.5	29.6	20.1	185.6	18
ENUGU	160.7	6	46	32.3	23.6	219.9	17.2
GOMBE	8.9	1	55.7	36.8	25.1	252.6	19.8
GUSAU	25.3	2	57.7	38.2	25.7	263.6	20.2
IBADAN	51	3	42.6	31.7	24.1	219.4	16
IJEBU	28.3	5	42.6	32.0	24.5	222.8	15.8
IKEJA	81.7	5	47.8	33.5	24.4	230.7	17.6
ILORIN	38.6	2	48.2	32.5	22.4	213.7	18.2
ISEYIN	79.3	4	43.1	31.2	23.1	210.9	16.4
JOS	120	8	44.8	27.9	17.6	162.2	18.4
KADUNA	54.9	6	51.5	33.7	22.5	220.9	19.3
KANO	0	0	65.8	41.5	26.4	285.3	22.3
KATSINA	0	0	59.5	40.5	28.1	289.3	20.1
LAFIA	97.6	4	48.5	33.9	24.5	233.7	17.8
LOKOJA	13.4	2	45.6	33.6	25.3	236.2	16.6
MAIDU	2	1	63.6	42.0	28.5	300	21.1
MAKURDI	4.5	3	52.4	35.0	24.3	237.8	19.1
MINNA	87.3	3	52.7	34.6	23.3	230.8	19.4
NGURU	0	0	XX	42.3	XX	XX	XX
OGOJA	103.9	4	49.9	33.8	23.8	228.8	18.4
ONDO	125.6	6	48.7	32.0	21.9	208.7	18.5
OSHODI	141.8	5	46.9	33.5	24.8	232.7	17.2
OSOGBO	77.3	6	45.9	31.4	22.1	205.9	17.6
OWERRI	92.6	5	45.1	31.9	23.3	215.5	17
PHC	80.1	6	42.8	31.4	23.6	214.4	16.1
POT	1.8	1	64	41.0	26.7	284	21.7
SHAKI	5.7	1	49.9	33.5	23.3	224.5	18.5
SOKOTO	0	0	62.5	41.1	27.2	287.9	21.2
UMUAHIA	49.5	4	44	32.0	23.9	219.6	16.5
WARRI	99.8	5	4.3	32.6	24.6	226.4	16.4
YELWA	16.9	1	52.3	37.0	26.8	262.9	18.3
YOLA	10.1	2		38.0	XX	XX	XX
ZARIA	44.2	6	52.6	34.6	23.3	230.9	19.3
USI-EKITI	56	4	50.7	32.3	21.2	206.3	19.4
ADO-EKITI	63.4	6	46.4	32.0	22.6	211.8	17.6

Note:  
 Rainfall (mm)  
 PET = Potential Evapotranspiration (mm/decade)  
 TMAX = Maximum Temperature (°C)  
 TMIN = Minimum Temperature (°C)  
 GDD = Growing Degree Day (day)  
 RAD = Radiation (MJ/m<sup>2</sup>/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](mailto:agrometbulletin@nimet.gov.ng); NiMet WEB SITE: [www.nimet.gov.ng](http://www.nimet.gov.ng)