

## Agrometeorological Bulletin No.17, Dekad 2, JUNE (11 –20) 2015

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### SUMMARY

The 2<sup>nd</sup> dekad of June shows deficit rainfall particularly in north that is currently experiencing various degree of Meteorological and Agricultural drought. The relative position of the Inter-Tropical Discontinuity (ITD) was between latitude 14.5 and 15°N. *The highest rainfall amount for the dekad was recorded over Oshodi with 158.6mm in 5 rain-days, followed by Warri with 156.5mm in 8 rain-days and Eket with 146.7mm in 8 rain-days.* The country experienced warmer than normal maximum temperature anomalies in the north except Lokoja and Ilorin which had colder than normal maximum temperature anomalies.

### 1.0 RAINFALL PATTERN

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

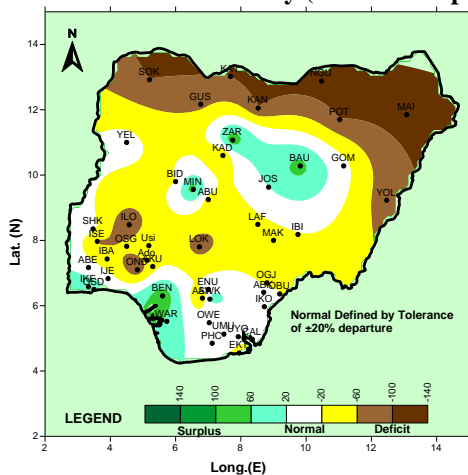


Fig.1: 2<sup>nd</sup> DEKAD JUNE, RAINFALL ANOMALIES

The rainfall anomaly for the 2<sup>nd</sup> dekad of June as shown in Fig.1 above indicates deficit rainfall over the country except for Zaria, Bauchi, Minna, Ikeja, Benin and Warri that recorded surplus rainfall. This situation is not encouraging to farmers and if this situation continue over the north it will trigger drought alert.

#### Rainfall Amounts

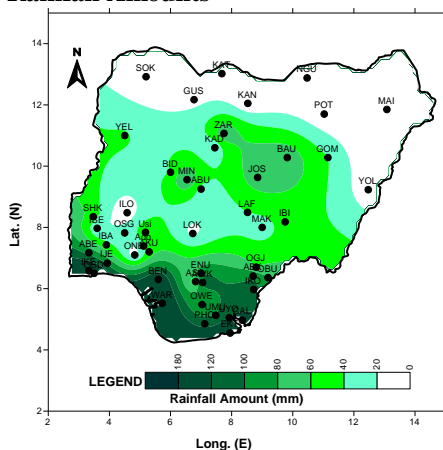


Fig.2: 2<sup>nd</sup> DEKAD JUNE, RAINFALL AMOUNT

The actual rainfall amount for the 2<sup>nd</sup> dekad of June, 2015 as shown in Fig.2 above indicates poor rainfall spread

over the north. *The highest rainfall amount for the dekad was recorded over Oshodi with 158.6mm in 5 rain-days, followed by Warri with 156.5mm in 8 rain-days and Eket with 146.7mm in 8 rain-days.*

#### 1.2 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE 2<sup>nd</sup> 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 below normal except for Bauchi, Jos, Minna and Zaria that recorded above normal rainfall. Stations in the south recorded below normal rainfall except Lagos, Benin and Warri that recorded above normal rainfall.

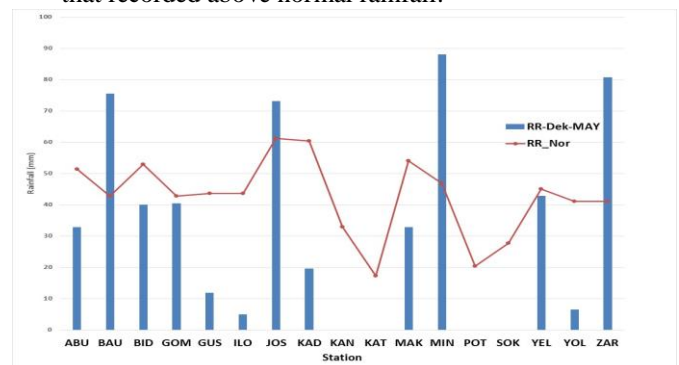


Fig.3A Comparison of Normal with Rainfall in the Northern part of Nigeria

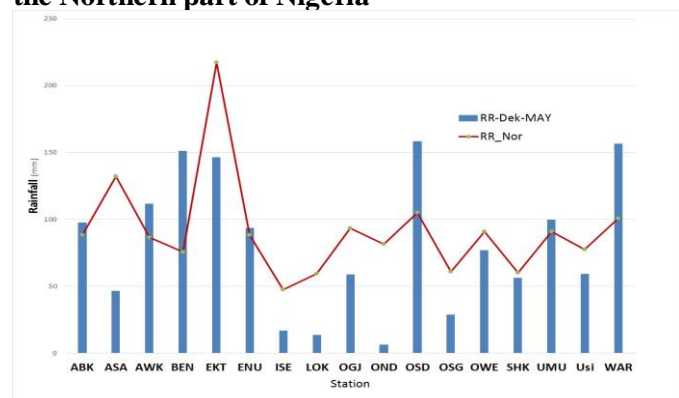
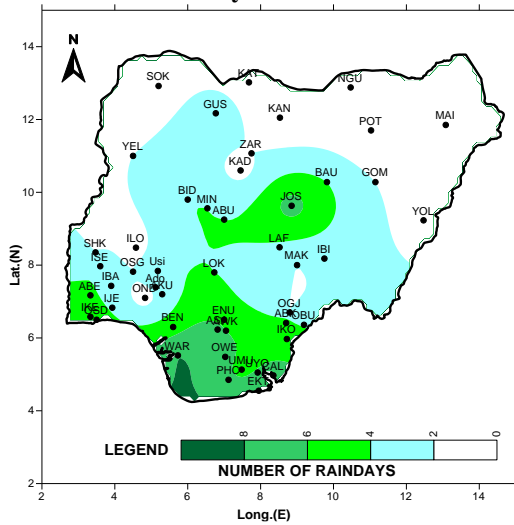


Fig.3B Comparison of Normal with Rainfall in the Southern part of Nigeria

### 1.3 Number of Rain Days.

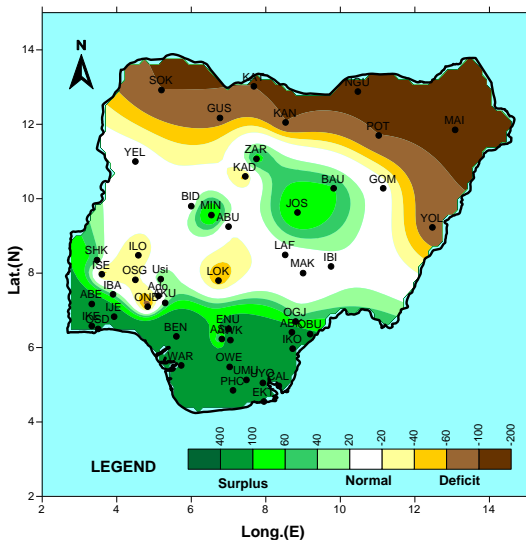


**Fig.4: NUMBER OF RAIN DAYS**

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

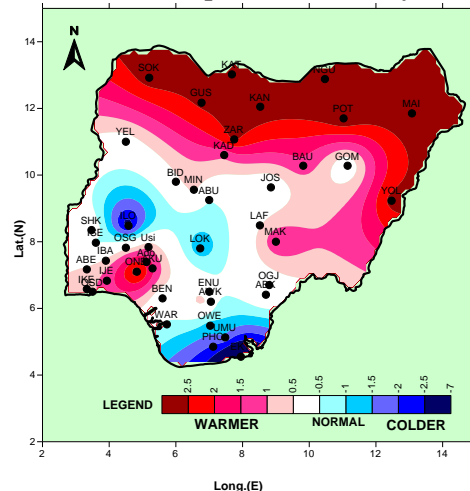
The Soil moisture condition over the north shows extreme dryness. Analysis shows that the central states had normal to wet condition. The inland part of the Southwest is still under the effect of deficit soil moisture. The coastal area had surplus moisture condition as shown in *Fig.5* below



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

### 3.0 MAXIMUM TEMPERATURE TREND

#### 3.1 Maximum Temperature Anomaly

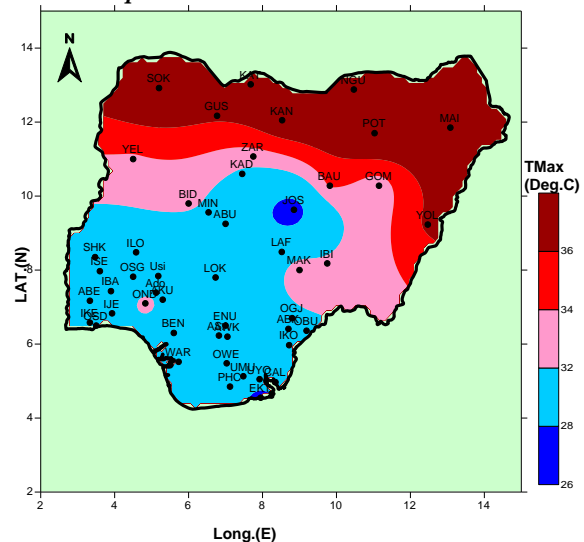


**Fig.6: Maximum Temperature Anomaly.**

The maximum temperature anomaly analysis for 2<sup>ND</sup> dekad of June, 2015 shows a warmer than normal condition over the north except for Lokoja and Ilorin with colder than normal condition. The south show normal to colder than normal temperature except Ondo and Lagos that had warmer than normal temperature conditions.

#### 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. Potiskum recorded the highest value of 39.0°C while the lowest temperature was recorded over Jos with 26.2°C.



**Fig. 7: Mean maximum Temperature**

## WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 3 (21 TO 30), 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 28°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	97.8	5	37.4	31	23.5	192.4	15.6
ABUJA	32.8	4	38.7	30.3	21.7	179.8	16.5
ASABA	46.7	7	41.4	31.8	22.7	192.6	17.3
AWKA	111.8	6	37.4	30.7	23.1	188.9	15.7
BAUCHI	75.5	4	46.5	34.3	23.1	207.3	18.9
BENIN	151.2	5	33.2	30.4	24.5	194.8	13.8
BIDA	40	4	39.4	32.3	24.2	202.8	16.1
EKET	146.7	8	37.2	27.5	19.1	152.9	16.7
ENUGU	93.5	5	36.4	30.5	23.4	189.2	15.3
GOMBE	40.5	2	42.6	32.8	23.1	199.4	17.6
GUSAU	11.9	4	48.1	36.4	25.0	227.2	18.9
ILLORIN	5	1	38.2	30.9	22.9	189.1	16
ISEYIN	17	4	34.4	29.2	22.5	178.6	14.7
JOS	73.1	7	36.2	26.2	17.4	137.9	16.7
KADUNA	19.6	1	41.3	31.6	22.1	188.4	17.4
KANO	0	0	51.1	38.2	25.9	240.5	19.6
KATSINA	0	0	51.4	38.3	25.8	240.4	19.8
LOKOJA	13.7	4	36.5	30.3	23.0	186.5	15.4
MAIDU	0	0	51.2	39.0	27.1	243.5	20.3
MAKURDI	32.8	2	42.2	33.0	23.9	204.3	17.2
MINNA	88.1	4	40.3	31.6	22.8	192.1	16.8
OGOJA	58.8	2	39.2	31.5	23.3	193.7	16.3
ONDO	6.3	1	38.5	32.6	25.0	208.2	15.6
OSHODI	158.6	5	33.7	30.7	24.2	194.7	14
OSOGBO	28.7	2	37.1	30.1	22.5	183	15.7
OWERRI	77.1	7	35.9	29.7	22.5	180.9	15.3
POT	0	0	53.2	39.0	25.9	244.5	20.3
SHAKI	56.5	2	37.2	30.1	22.3	181.7	15.8
SOKOTO	0	0	51.2	39.0	26.9	249.5	19.4
UMUAHIA	99.7	5	34	29.4	23.1	182.3	14.5
USI-EKITI	59.3	4	41.9	30.7	20.8	177.9	17.9
WARRI	156.5	8	32.1	30.3	24.3	193.2	13.3
YELWA	42.9	2	41.1	33.7	25.0	213	16.5
YOLA	6.5	1	45.9	36.4	26.6	234.9	17.8
ZARIA	80.7	2	44.4	33.1	22.6	198.3	18.3

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:

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