

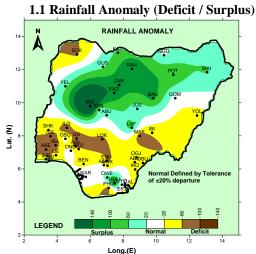
NATIONAL WEATHER FORECASTING AND CLIMATE RESEARCH CENTRE, BILL CLINTON DRIVE, NNAMDI AZIKIWE INTERNATIONAL AIRPORT, P.M.B. 615, GARKI, ABUJA, NIGERIA

# Agrometeorological Bulletin No.22, Dekad 1, AUGUST (1 –10) 2015 ISSN: 2315-9790

## **SUMMARY**

The 1<sup>st</sup> dekad of August, 2015 shows persistent dryness over the southwest as a result of the little dry season with deficit rainfall anomaly and raindays of between 1 to 2 days. The north had normal to surplus rainfall except Sokoto, Ilorin, Lokoja, Makurdi and Yola that recorded deficit. The Inter-Tropical Discontinuity (ITD) was located between latitude 19 and 20°N. *The highest rainfall amount for the dekad was recorded over Umuahia with 241.3mm in 8 rain-days, followed by Kano with 237.5mm in 5 rain-days and Bauchi with 196.8mm in 7 rain-days.* The maximum temperature anomaly analysis shows normal to warmer than normal maximum temperature over the entire country except Yola, Kano and Eket axis that recorded colder than normal maximum temperature. The soil moisture indices over the southwest shows deficit condition.

## **1.0 RAINFALL PATTERN**



## Fig.1: 1<sup>ST</sup> DEKAD AUGUST, RAINFALL ANOMALIES

The rainfall anomaly over the country for the 1<sup>st</sup> dekad of August, 2015 as shown in Fig.1 above shows persistent rainfall deficit in the south except areas in and around Umuahia and Owerri that recorded surplus. The north had normal to surplus rainfall except Sokoto, Ilorin, Lokoja, Makurdi and Yola that recorded deficit. The persistent deficit experienced particularly over the southwest is as a result of the Little Dry Season (LDS).

#### **Rainfall Amounts**

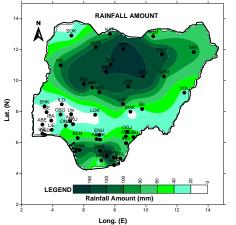
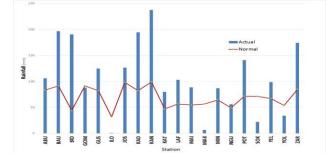
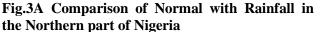


Fig.2: 1ST DEKAD AUGUST, RAINFALL AMOUNT

The actual rainfall amount for the 1<sup>st</sup> dekad of August, 2015 as shown in Fig.2 indicates a good spread of rainfall over the north and south-south states. Rainfall was however poorly distributed in the southwest. *The highest rainfall amount for the dekad was recorded over Umuahia with 241.3mm in 8 rain-days, followed by Kano with 237.5mm in 5 rain-days and Bauchi with 196.8mm in 7 rain-days.* 

**1.2 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE 1<sup>ST</sup> DEKAD OF AUGUST, 2015** The charts below shows the comparison of the actual rainfall amounts recorded against the normal during the dekad is shown in *Fig.3A and Fig.3B*. The stations in the north recorded normal to above normal rainfall except Ilorin, Makurdi, Sokoto and Yola that recorded below normal rainfall. Stations in the south recorded normal to below normal rainfall except Umuahia, Owerri and Warri.





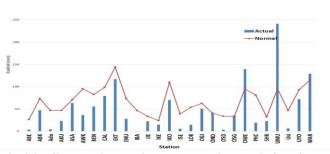
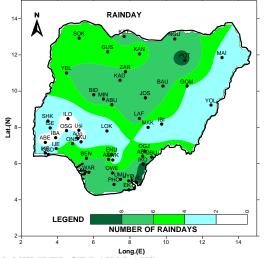
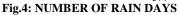


Fig.3A Comparison of Normal with Rainfall in the Southern part of Nigeria

### 1.3 Number of Rain Days.





The rain-days distribution over the country for the  $1^{st}$  dekad of August, 2015 is shown in *Fig.4* above and it indicates a good rainfall distribution in the over the country except the southwest with between 1 and 2 raindays.

## 2.0 SOIL MOISTURE CONDITION

The Soil moisture condition over the north shows surplus moisture condition. The northwest and central states had surplus soil moisture condition except Sokoto, Lokoja, Makurdi and Ilorin with deficit soil moisture condition. The soil moisture indices over the southwest shows deficit condition. The southeast shows surplus soil moisture condition as shown in Fig.5 below

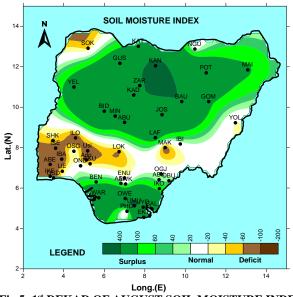


Fig.5: 1<sup>st</sup> DEKAD OF AUGUST SOIL MOISTURE INDEX (SMI)

## **3.0 MAXIMUM TEMPERATURE TREND 3.1 Maximum Temperature Anomaly**

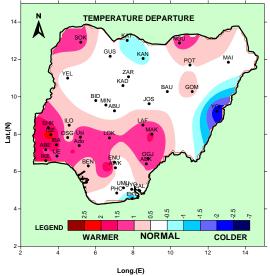
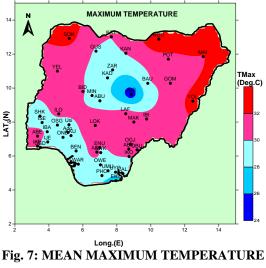


Fig.6: MAXIMUM TEMPERATURE ANOMALY.

The maximum temperature anomaly analysis for 1<sup>st</sup> dekad of August, 2015 shows normal to warmer than normal maximum temperature over the entire country except Yola, Kano and Eket axis that recorded colder than normal maximum temperature.

## 3.2 Maximum Temperature Values.

The actual mean maximum temperature distribution across the country for the 1<sup>st</sup> dekad of August 2015, is shown in *Fig.7* below. The North recorded maximum temperature of between 30 to  $34^{\circ}C$  except Kaduna, Lafia Minna, Abuja, Bauchi and Jos that recorded temperature values below  $30^{\circ}C$ . The south recorded temperature value ranging from 27 to  $30^{\circ}C$ . Nguru recorded the highest maximum temperature value of  $33.7^{\circ}C$  while the lowest temperature was recorded over Jos with 24.5°C.



#### WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 2 (11 TO 20), OF AUGUST, 2015. 4.1 Weather Outlook

The position of Inter Tropical Discontinuity (ITD) is likely to fluctuate between latitudes 20degN and 22degN. The northern part of the country is expected to be cloudy with thundery activities; the central part is also 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 Southwest may start to experience a recovery from the little dry season to mark the beginning of its second season

The northern and the central states are expected to have mean maximum temperatures to range from 23  $^{o}C$  to  $34^{\circ}C$ , while the mean minimum temperatures will range

from  $17^{o}C$  to  $23^{o}C$ . The mean maximum temperatures over the inland and coastal areas of the South are expected to be between  $27^{\circ}C$  and  $30^{\circ}C$ , while the mean minimum temperatures will range from  $18^{\circ}C$  to  $23^{\circ}C$ .

## 4.2 Agricultural Activity/Outlook

Harvest of maize new yam and vegetables will preoccupy most farmers in the south and central states. Weeding and fertilizer application will continue over the Northern states. Harvest in Maize, Potatoes and vegetables, rice transplant will preoccupy farmers in the central states. For more information please refer to the 2015 SRP and consult the nearest ADP or Ministry of Agriculture.

TABLE OF AGROMETEOROLOGICAL	L DATA FOR THE DEKA	١D
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TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD															
STATION	RAINFALL	RAINDA Y	PET	тмах	TMIN	DD	RADIATIO N	MAKURDI	6.8	2	39.6	31.7	24.3	199.7	16.3
ABEOK	3.7	1	37.8	30.4	23.4	189.0	15.9	MINNA	86.7	7	33.2	29.0	23.2	181.1	14.1
ABAKALIK I	47.4	5	37.9	30.6	23.7	191.7	15.8	NGURU	56.2	7	54	33.7	18.4	180.3	23.1
ABUJA	106	6	36.7	29.1	22.1	175.8	15.8	OGOJA	50.7	5	39.4	31.3	23.9	195.7	16.3
AKURE	23.3	2	37.7	29.2	22.0	175.9	16.2	ONDO	40.2	5	37	29.5	22.6	180.7	15.8
ASABA	63.5	6	40	30.8	23.1	189.4	16.8	OSHODI	3.6	2	34.8	30.0	24.1	190.4	14.6
AWKA	36.7	2	35.5	29.7	23.5	185.6	15	OSOGBO	35.7	2	36.8	28.3	21.1	167.3	16.1
BAUCHI	196.8	7	39.8	29.8	21.5	176.5	17.1	OWERRI	139.5	7	36.7	29.4	22.6	180.1	15.7
BENIN	55.6	6	33.6	28.9	23.1	180.2	14.3	РНС	19.1	7	33.5	28.9	23.2	180.6	14.3
BIDA	190.6	8	37.3	30.3	23.2	187.6	15.7	POT	141.2	9	42.3	31.4	22.4	188.6	17.8
CALABAR	79.3	9	31	28.3	22.9	176	13.3	SHAKI	22.7	3	39.1	29.1	21.1	170.9	17
EKET	117	7	37.3	26.5	18.5	145.1	17	зокото	22.3	5	43.2	32.6	23.5	200.5	17.8
ENUGU	27.9	5	34.7	29.9	24.1	190	14.5	UMUAHIA	241.3	8	35.1	29.4	23.3	183.4	14.8
GOMBE	88	4	39.6	30.5	22.7	186	16.7	UYO	72.1	5	33.6	29.0	23.3	181.6	14.3
GUSAU	124.7	5	37.7	29.8	22.3	180.7	16.1	WARRI	129.2	7	32.4	29.1	23.9	185	13.7
IBADAN	0.1	1	38.7	29.9	22.4	181.4	16.5	YELWA	98.7	6	37.7	30.6	23.3	189.7	15.8
IJEBU	22.4	4	35.7	29.5	23.1	182.9	15.1	YOLA	34.2	2	44.1	32.6	23.4	199.8	18.1
IKEJA	14.8	4	36.5	30.1	23.5	187.8	15.4	ZARIA	174.4	6	36.9	28.8	21.4	171.1	16
ІКОМ	69.9	9	36.5	30.1	23.6	188.3	15.3	USI-EKITI	6.2	2	39.3	28.8	20.6	166.8	17.2
ILORIN	0.8	1	41.7	30.8	22.1	184.2	17.7	ADO-EKITI	4.1	2	38.4	29.4	21.9	176.5	16.5
ISEYIN	5.4	3	40.1	29.7	21.4	175.4	17.2								
SOL	126.7	8	33.6	24.5	17.5	130.1	15.8	Note: Rainfall (mm) PET = Potential Evapotranspiration (mm/decade) TMAX = Maximum Temperature ( <sup>o</sup> C) TMIN = Minimum Temperature ( <sup>o</sup> C) GDD = Growing Degree Day (day) RAD = Radiation (MJ/m <sup>2</sup> /day)							
KADUNA	194.5	7	38.2	28.9	21.0	169.3	16.6								
KANO	237.5	5	39.1	30.1	21.9	179.8	16.7								
KATSINA	80.1	7	39.7	30.0	21.5	177.6	17								
LAFIA	103.1	8	39.8	31.2	23.5	193.7	16.6								
LOKOJA	14.5	2	39.3	31.5	24.3	199	16.2								
MAIDU	88.6	3	41.8	32.0	23.4	196.7	17.3								

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: The Director-General/CEO, Nigerian Meteorological Agency (NiMet),

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