



Agrometeorological Bulletin No.24, Dekad 3, AUGUST (21 –31) 2015

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SUMMARY

The rainfall anomaly over the country for the 3rd dekad of August, 2015 shows a recovery from the persistent rainfall deficit in the southwest. The north recorded normal to surplus rainfall except Sokoto, Gusau, Kaduna, Abuja and Gombe that recorded deficit. A good spread of rainfall was recorded over the country except Sokoto and its environment. The Inter Tropical Discontinuity (ITD) has commence its equatorward movement and is likely to fluctuate between latitudes 16degN and 19degN. *The highest rainfall amount for the dekad was recorded over Bauchi with 243.5mm in 4 rain-days, followed by Abakaliki with 209.5mm in 8 rain-days and Ilorin with 186.8mm in 3 rain-days.* The maximum temperature anomaly analysis shows normal to warmer than normal maximum temperature over the extreme northern states. The soil moisture indices over the country shows surplus except Sokoto, Gusau, Abeokuta and Ijebu-Ode that shows deficit soil moisture condition.

1.0 RAINFALL PATTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

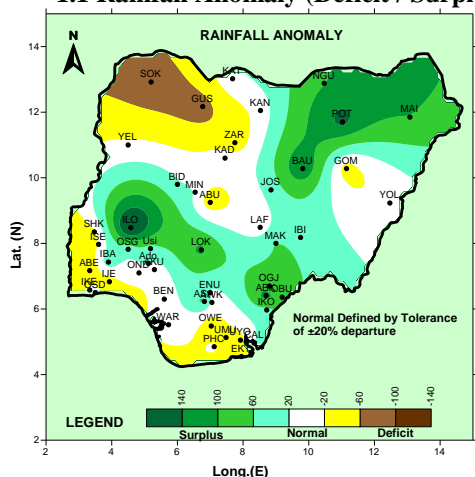


Fig.1: 3rd DEKAD AUGUST, RAINFALL ANOMALIES

The rainfall anomaly over the country for the 3rd dekad of August, 2015 as shown in Fig.1 above shows a recovery from the persistent rainfall deficit in the southwest. The north recorded normal to surplus rainfall except Sokoto, Gusau, Kaduna, Abuja and Gombe that recorded deficit.

Rainfall Amounts

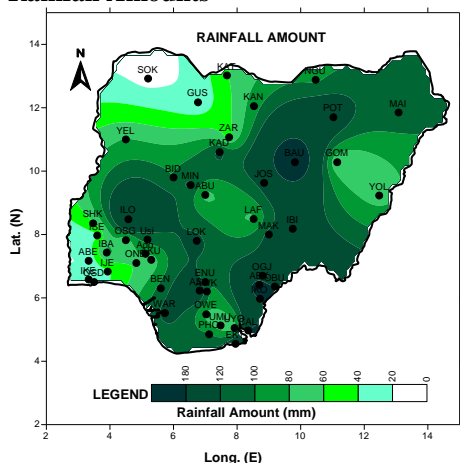


Fig.2: 3rd DEKAD AUGUST, RAINFALL AMOUNT

The actual rainfall amount for the 3rd dekad of August, 2015 as shown in Fig.2 indicates a good spread of rainfall

over the country except Sokoto and its environment. *The highest rainfall amount for the dekad was recorded over Bauchi with 243.5mm in 4 rain-days, followed by Abakaliki with 209.5mm in 8 rain-days and Ilorin with 186.8mm in 3 rain-days.*

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

The charts below shows the comparison of the actual rainfall amounts recorded against the Climatic normal during the dekad is shown in Fig.3A and Fig.3B. The stations in the north recorded normal to above normal rainfall except Abuja, Gombe, Gusau, Sokoto and Zaria that recorded below normal rainfall. Stations in the south recorded normal to below normal rainfall except Umuahia, Owerri and Warri.

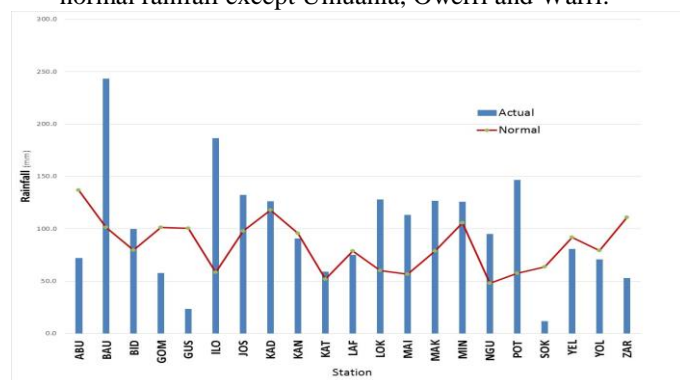


Fig.3A Comparison of Normal with Rainfall in the Northern part of Nigeria

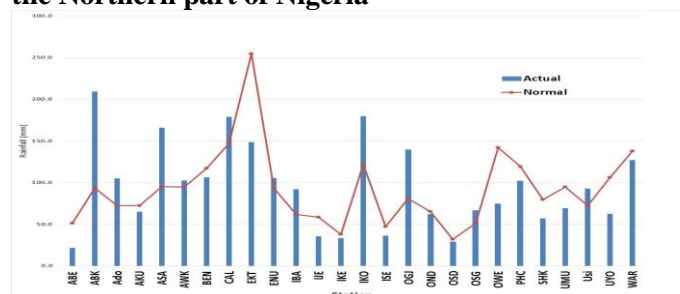


Fig.3A Comparison of Normal with Rainfall in the Southern part of Nigeria

1.3 Number of Rain Days.

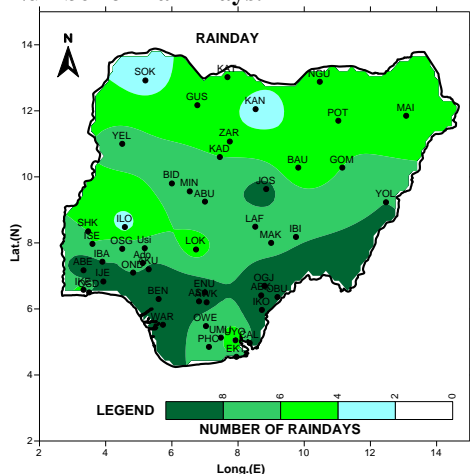


Fig.4: NUMBER OF RAIN DAYS

The rain-days distribution over the country for the 3rd dekad of August, 2015 is shown in *Fig.4* above and it indicates a good rainfall distribution in the over the country.

2.0 SOIL MOISTURE CONDITION

The Soil moisture condition over the North shows surplus soil moisture condition except Sokoto that shows deficit moisture condition. The soil moisture indices over the southwest shows deficit condition over Abeokuta, Ikeja and Ijebu-Ode. The southeast shows surplus soil moisture condition as shown in *Fig.5* below

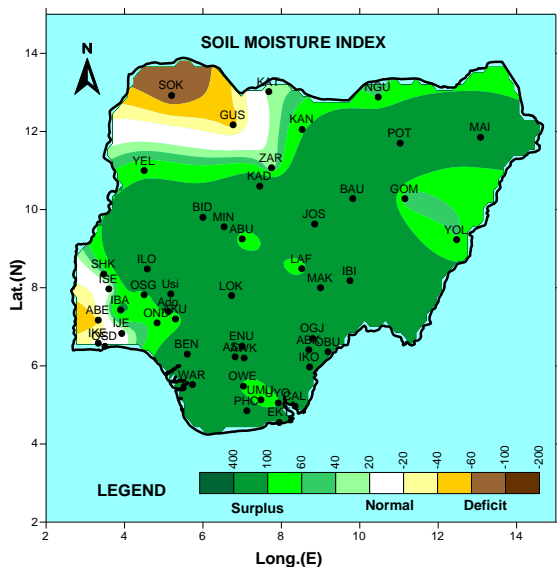


Fig.5: 3rd DEKAD OF AUGUST SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

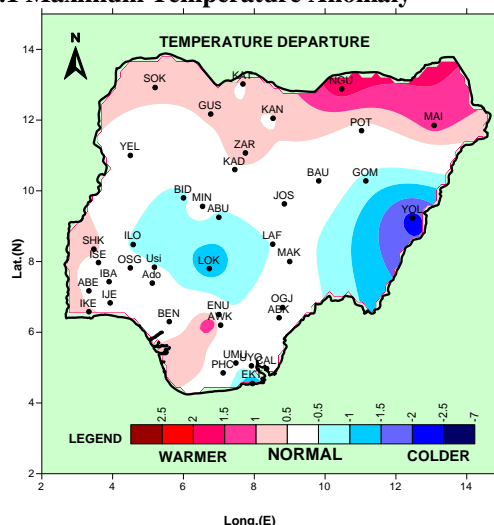


Fig.6: MAXIMUM TEMPERATURE ANOMALY.

The maximum temperature anomaly analysis for 3rd dekad of August, 2015 shows normal to warmer than normal maximum temperature over the extreme northern states. Most part of the country had normal temperature condition except Lokoja, Eket and Yola axis that recorded colder than normal maximum temperature.

3.2 Maximum Temperature Values.

The actual mean maximum temperature distribution across the country for the 3rd dekad of August 2015, is shown in *Fig.7* below. The North recorded maximum temperature of between 30 to 34°C *except Kaduna, Lafia Minna, Abuja, Bauchi and Jos that recorded temperature values below 30°C*. The south recorded temperature value ranging from 27 to 30°C. *Nguru recorded the highest maximum temperature value of 34.2°C while the lowest temperature was recorded over Jos with 24.3°C.*

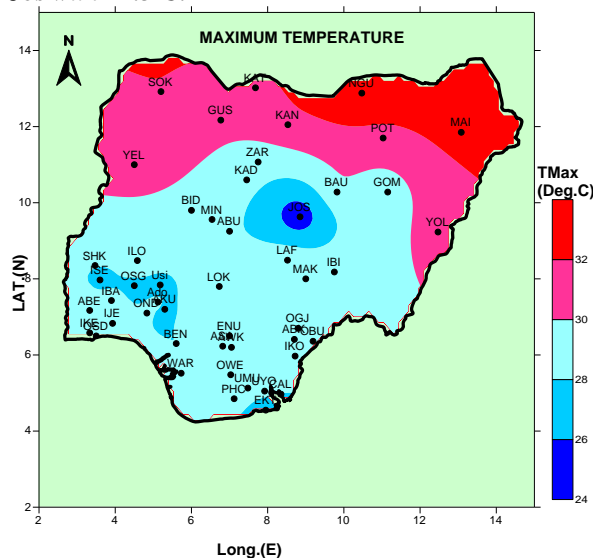


Fig. 7: MEAN MAXIMUM TEMPERATURE WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 1 (1 TO 10), OF SEPTEMBER, 2015.

4.1 Weather Outlook

The Inter Tropical Discontinuity (ITD) has commenced its equatorward movement and is likely to fluctuate between latitudes 16degN and 19degN. 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 with intermittent rainfall. The Southwest is beginning 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 24 °C to 34°C, while the mean minimum temperatures will range

from 17°C to 23°C. The mean maximum temperatures over the inland and coastal areas of the South are expected to be between 27°C and 30 °C, while the mean minimum temperatures will range from 18°C to 23°C.

4.2 Agricultural Activity/Outlook

Preparation for dry season farming has commenced with broadcast of vegetable seeds in the nursery in the north. Harvest of maize, new yam and vegetables will preoccupy most farmers in the south and central states. Planting of sorghum and cowpea will continue over the Northern states. Harvest in Maize, Potatoes and vegetables 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 DATA FOR THE DEKAD

STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	DD	RADIATION
ABEOK	21.6	10	39.4	29.4	23.5	202.9	15.1
ABAKALIKI	209.4	8	41.6	29.5	22.7	198.6	16.1
ABUJA	72.2	8	42.7	28.3	20.7	181.3	17
AKURE	65.1	9	39.2	27.7	21.4	182.0	15.6
ASABA	165.9	10	44.1	30.1	22.6	201.8	17
AWKA	102.7	9	41.4	29.5	22.8	199.3	16
BAUCHI	243.5	4	47.3	29.8	20.7	189.7	18.6
BENIN	106.2	10	34.8	28.0	23.2	193.5	13.6
BIDA	99.7	7	41.3	29.5	22.8	199.7	15.9
CALABAR	178.9	8	36.7	28.0	22.6	190.6	14.4
EKET	148.4	7	44.2	26.6	18.0	157	18.4
ENUGU	105.4	9	40.4	29.4	23.0	199.7	15.6
GOMBE	57.7	6	41.7	29.0	22.0	192.4	16.3
GUSAU	23.4	5	43.9	30.5	23.0	206.2	16.8
IBADAN	91.9	8	40.2	28.7	22.2	191.6	15.7
IJEBU	35.5	8	35.7	28.1	23.1	193.7	13.9
IKEJA	33.2	5	37.3	28.9	23.5	200.3	14.4
IKOM	179.9	11	39.4	29.0	22.8	197.1	15.3
ILORIN	186.4	3	42.4	29.3	21.9	193.4	16.5
ISEYIN	36.4	6	36.8	27.2	21.5	179.6	14.7
JOS	132.3	9	39.5	24.3	16.4	136	17.1
KADUNA	126.4	6	44	28.9	21.0	186.6	17.4
KANO	90.6	3	47.3	31.4	22.6	208.9	18
KATSINA	59.2	6	47.3	31.3	22.6	208.4	18.1
LAFIA	75.2	7	42.6	29.6	22.4	197.7	16.5
LOKOJA	127.9	5	37.9	29.1	23.3	200.2	14.6
MAIDU	113.1	4	50.6	32.9	23.2	220.5	18.9
MAKURDI	126.8	7	42.6	29.8	22.4	199.6	16.4
MINNA	125.8	7	41.7	29.3	22.3	195.8	16.2
NGURU	94.9	5	60.5	34.2	20.0	210.3	23
OGOJA	139.8	10	40.7	29.8	23.2	203.3	15.6
ONDO	62	8	37.5	28.1	22.4	189.4	14.7
OSHODI	29.2	8	37.1	29.0	23.7	202.3	14.3
OSOGBO	66.6	8	39.2	27.6	21.1	179.9	15.6
OWERRI	74.6	6	40.8	29.1	22.6	196.2	15.9
PHC	102.3	7	39.5	29.0	23.0	198.3	15.3
POT	146.5	6	46.9	31.1	22.6	207.2	17.9
SHAKI	56.8	6	40.2	28.2	21.6	186	15.9
SOKOTO	11.8	3	47.7	31.9	23.2	215.2	18
UMUAHIA	69.4	7	39.5	29.1	23.1	199.5	15.3
UYO	62.3	3	37.9	28.7	23.2	197.5	14.7
WARRI	126.9	10	37.6	29.3	23.9	204.5	14.4
YELWA	80.9	7	43.8	30.6	23.2	207.7	16.7
YOLA	71	8	44.4	30.9	23.2	209.5	16.9
ZARIA	53	5	43.4	29.1	21.4	189.8	17.1
USI-EKITI	93	6	43.9	28.3	20.2	178.3	17.6
ADO-EKITI	105.1	7	37.2	27.4	21.5	180.8	14.8

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