



Agrometeorological Bulletin No.25, Dekad 1, September (01 –10) 2015

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SUMMARY

The rainfall anomaly for the 1st dekad of September, 2015 as shown in Fig.1 above shows surplus rainfall in and around Sokoto, Maiduguri, Potiskum, Gombe and Ilorin in the north. Most parts of the south recorded deficit rainfall especially the Abeokuta-Ijebu axis. However, Awka and Akure recorded surplus rainfall. A good spread of rainfall was recorded over the country except Abeokuta and its environment. The Inter Tropical Discontinuity (ITD) has commence its equatorward movement and fluctuates between latitudes 15degN and 19degN. **The highest rainfall amount for the dekad was recorded over Asaba with 204.3mm in 9 rain-days, followed by Warri with 202.2mm in 9 rain-days and Ilorin with 201.9mm in 3 rain-days.** The maximum temperature anomaly analysis shows normal to colder than normal maximum temperature over the country. The soil moisture indices over the country shows surplus except Nguru, Abeokuta and Ijebu-Ode that shows deficit soil moisture condition.

1.0 RAINFALL PATTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

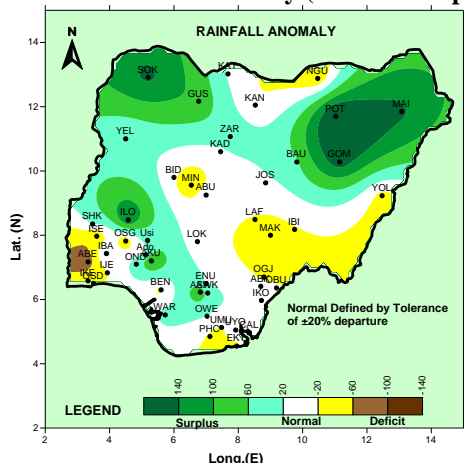


Fig.1: 1ST DEKAD SEPT, RAINFALL ANOMALIES

The rainfall anomaly for the 1st dekad of September, 2015 as shown in Fig.1 above shows surplus rainfall in and around Sokoto, Maiduguri, Potiskum, Gombe and Ilorin in the north. Most parts of the south recorded deficit rainfall especially the Abeokuta-Ijebu axis. However, Awka and Akure recorded surplus rainfall.

Rainfall Amounts

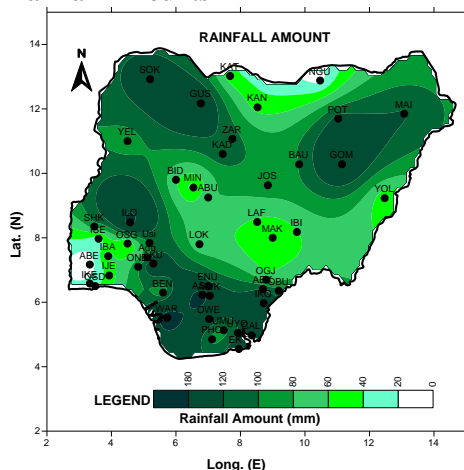


Fig.2: 1ST DEKAD SEPT, RAINFALL AMOUNT

The actual rainfall amount for the 1st dekad of September, 2015 as shown in Fig.2 indicates a good spread of rainfall

over the country except Abeokuta and its environment. **The highest rainfall amount for the dekad was recorded over Asaba with 204.3mm in 9 rain-days, followed by Warri with 202.2mm in 9 rain-days and Ilorin with 201.9mm in 3 rain-days.**

1.2 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE 1ST 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 Makurdi, Nguru, Minna and Yola that recorded below normal rainfall. Stations in the south recorded normal rainfall except Abeokuta, Oshogbo and Isheyin that recorded below normal.

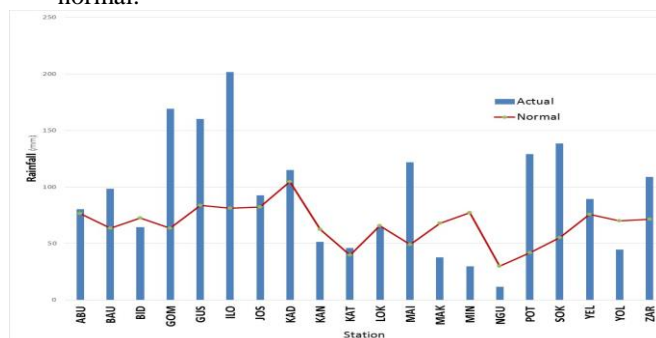


Fig.3A Comparison of Normal with Rainfall in the Northern part of Nigeria

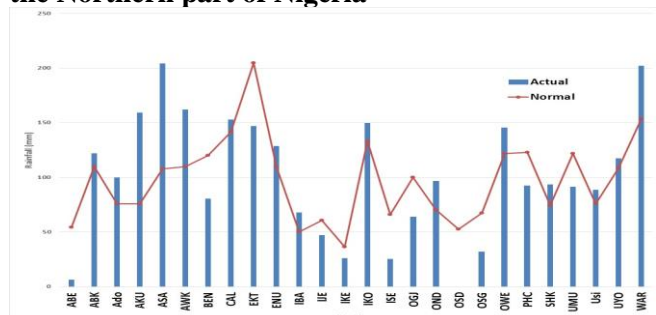


Fig.3A Comparison of Normal with Rainfall in the Southern part of Nigeria

1.3 Number of Rain Days.

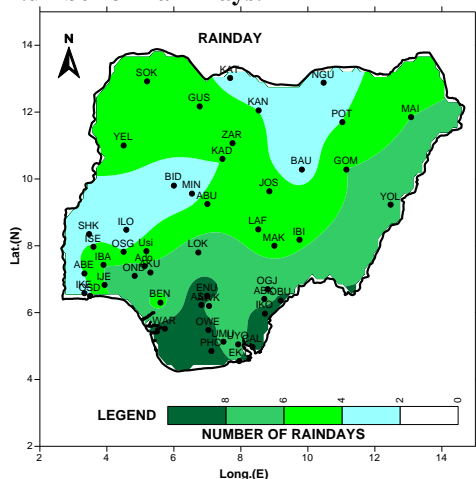


Fig.4: NUMBER OF RAIN DAYS

The rain-days distribution over the country for the 1st dekad of September, 2015 is shown in *Fig.4* above and it indicates a good rainfall distribution in the over the country with every station recording at least 2 rain day.

2.0 SOIL MOISTURE CONDITION

The Soil moisture condition over the North shows surplus soil moisture condition except Nguru 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

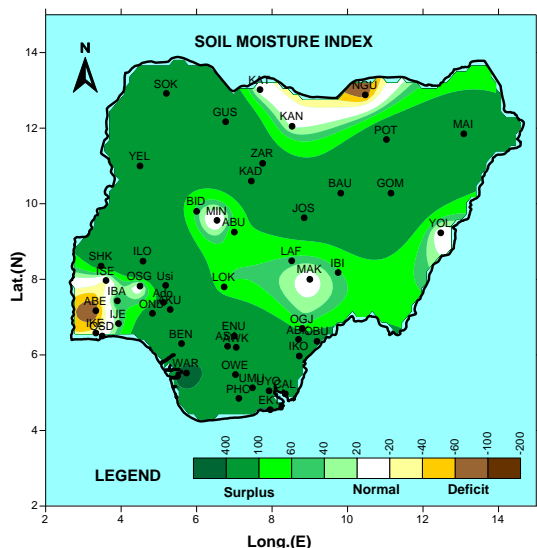


Fig.5: 1st DEKAD OF SEPTEMBER, 2015 SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

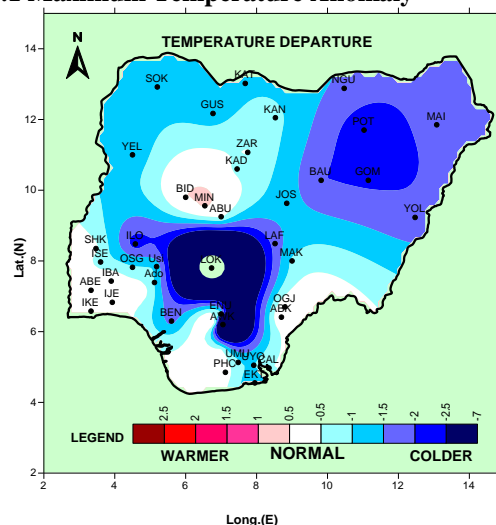


Fig.6: MAXIMUM TEMPERATURE ANOMALY.

The maximum temperature anomaly analysis for 1st dekad of September, 2015 over the country shows Colder to than normal maximum temperature, except Minna that recorded warmer than normal temperature.

3.2 Maximum Temperature Values.

The actual mean maximum temperature distribution across the country for the 1st dekad of September, 2015, is shown in *Fig.7* below. The North recorded maximum temperature of between 30 to 33°C *except Kaduna, Lafia Minna, Abuja, Bauchi, Gombe 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 33°C while the lowest temperature was recorded over Jos with 24.7°C.*

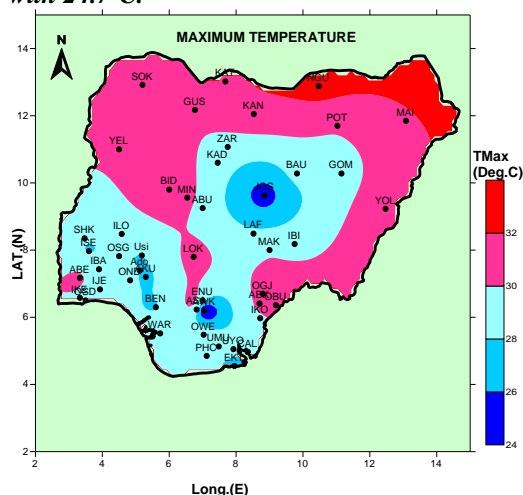


Fig. 7: MEAN MAXIMUM TEMPERATURE

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

4.1 Weather Outlook

The Inter Tropical Discontinuity (ITD) has commenced its equatorward movement and is likely to fluctuate between latitudes 15degN and 17degN. 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 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 32°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 29 °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. Transplanting of some vegetables have also commenced. 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
MAKURDI	37.8	5	37.8	29.8	23.1	184.8	15.9
MINNA	29.7	3	41.7	30.7	22.8	187.3	17.5
NGURU	11.6	3	51.1	33.0	21.0	190	21.4
OGOJA	63.9	8	39.8	30.6	23.6	190.9	16.6
ONDO	96.8	8	37.7	28.7	22.0	173.8	16.2
OSHODI							
OSOGBO	32.1	4	37.9	28.0	21.0	165.3	16.6
OWERRI	145.7	9	39.9	29.7	22.5	181.1	17
PHC	92.4	10	37.2	29.3	23.1	181.8	15.8
POT	129.1	4	41.6	30.3	21.9	181.1	17.7
SHAKI	93.4	4	38.1	28.3	21.3	167.7	16.6
SOKOTO	138.5	5	43.7	31.7	23.0	193.4	18.2
UMUAHIA	91.6	7	37.2	29.3	23.0	181.6	15.8
UYO	117.5	6	34.6	28.8	23.2	180	14.7
WARRI	202.2	9	35.2	29.1	23.5	182.8	14.9
YELWA	89.3	5	40.7	30.3	22.7	185.4	17.2
YOLA	44.7	7	46.5	31.9	21.9	188.8	19.5
ZARIA	108.9	5	42.2	29.4	20.8	171.4	18.3
USI-EKITI	88.5	6	39.8	28.0	20.2	161	17.6
ADO-EKITI	99.9	5	36.4	27.9	21.5	167.2	15.9
ABEOK	6.5	4	39.2	30.4	23.7	190.4	16.4
ABAKALIKI	121.9	7	41.8	30.4	22.6	185.2	17.7
ABUJA	80.4	5	42.5	29.2	20.5	168.7	18.5
AKURE	159.2	7	35	27.5	21.5	165.3	15.3
ASABA	204.3	9	39.4	29.8	22.8	182.7	16.7
AWKA	162	7	38.1	22.8	12.1	180.4	16.2
BAUCHI	98.3	3	38.9	28.8	21.0	168.8	16.8
BENIN	80.4	5	31	27.8	23.1	174.5	13.3
BIDA	64.4	3	42.5	31.2	23.2	191.9	17.7
CALABAR	152.9	10	35.7	28.5	22.5	174.9	15.3
EKET	147.1	8	41.3	26.9	18.1	144.8	18.8
ENUGU	128.5	9	37.8	29.4	22.9	181.6	16.1
GOMBE	169.3	6	38.9	28.7	21.2	169.5	16.8
GUSAU	160	6	41.5	30.2	22.1	181.3	17.7
IBADAN	67.9	6	39.4	29.2	22.0	176.1	16.9
IJEBU	47.3	6	35.1	28.6	22.9	177.1	15
IKEJA	25.9	3	36.9	29.7	23.6	186.9	15.5
IKOM	149.6	9	38.5	29.8	23.2	185.2	16.3
ILORIN	201.9	3	41.9	29.2	20.8	170	18.3
ISEYIN	25.5	4	36.6	27.7	21.2	164.7	16
JOS	92.7	5	35.6	24.7	17.0	128.5	16.7
KADUNA	115	4	40.8	29.2	21.0	171.1	17.7
KANO	51.6	4	45.1	31.4	22.0	187	19
KATSINA	46.1	3	46.1	31.6	21.7	186.3	19.5
LOKOJA	64.6	7	39.8	30.6	23.6	191.1	16.6
MAIDU	122	6	45.4	31.8	22.5	191.3	18.9

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:

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