NIGERIAN METEOROLOGICAL AGENCY

NATIONAL WEATHER FORECASTING AND CLIMATE RESEARCH CENTRE,
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SUMMARY

The third dekad under review experienced similar weather characteristics with the preceding dekad as the southward movement of the Inter Tropical Discontinuity (ITD) continued with its position remaining above the country and also witnessed widespread of rainfall activities across the country. Below-normal rainfall was recorded over Sokoto, Yelwa, Ilorin and Iseyin. The highest rainfall amount was recorded over Uyo with 333.2mm in 8 rain-days, followed by Kaduna with 260.8mm in 7 rain-days and Port-Harcourt with 239.4mm in 7 rain-days. The maximum temperature values were low with the highest value of 32.5^{0}C as recorded over Nguru, while Jos had the lowest value of 24.6^{0}C. Harvest of new yams, sweet potatoes, groundnut, fresh vegetables and corn/maize etc. continued across the country; In the extreme North earthen and fertilizer applications among other farming activities continued during the dekad and such activities would be expected to continue in the subsequent dekad.

1.0 RAINFALL PARTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

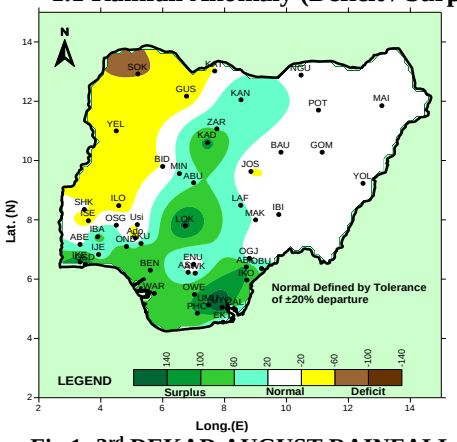


Fig.1: 3rd DEKAD AUGUST RAINFALL ANOMALIES

Rainfall anomaly over the country as shown in ***Fig.1*** above reveals that areas in and around the western flank of the country had deficit rainfall anomalies, while the areas in and around Kano, Kaduna, Lokoja extending to Benin, Lagos, Eket and Port-Harcourt experienced surplus anomalies as compared to the normal (1981-2010). The north-east flank extending down to northern Ogoja were normal.

Rainfall Amounts

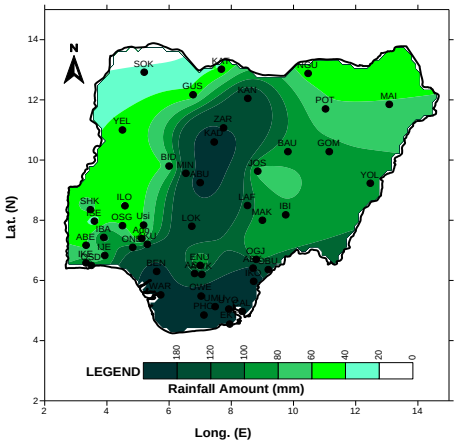
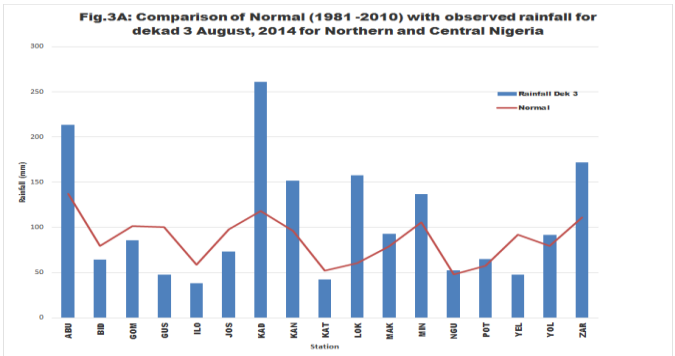
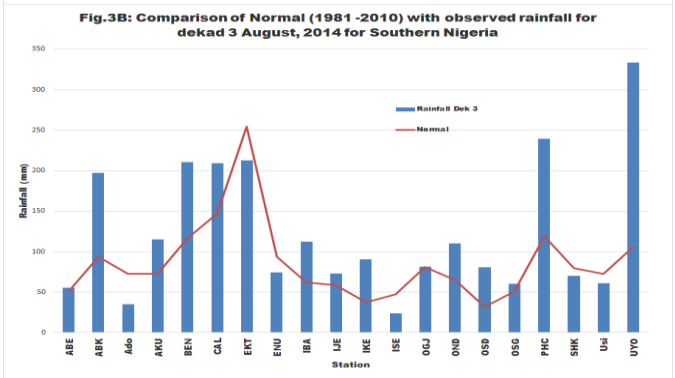


Fig.2 above depicts the actual observed rainfall amount measured over the country for the 3rd dekad of August and it shows that most stations across the country recorded good to excellent rainfall. ***The highest rainfall amount was recorded over Uyo with 333.2mm in 8 rain-days, followed by Kaduna with 260.8mm in 7 rain-days and Port-Harcourt with 239.4mm in 7 rain-day.***

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

The comparison of the actual rainfall amounts measured and normal/long term averages during the dekad over the northern and southern parts of the country is shown below in ***Fig.3A and Fig.3B*** respectively. Above-normal rainfall was experienced over Abuja, Kaduna, Kano, Lokoja, Minna and Zaria in the North, while Sokoto, Gusau, Yelwa, Katsina and Jos recorded below normal rainfall (***Fig.3A)***. Most stations in the South in ***Fig.3B*** recorded normal to above-normal rainfall except Isheyin, Ado-Ekiti and Usi-Ekiti that had below normal.





1.3 Number of Rain Days.

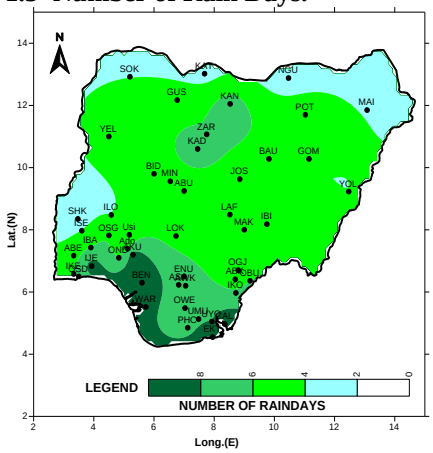


Fig.4: NUMBER OF RAIN DAYS

The rainfall distribution across the country is shown in ***Fig. 4*** above and it reveals that the country had a very good distribution of rainfall such that most stations recorded 4 - 9 rain-days with Eket and Calabar in the South recorded as high as 11 and 10 rain-days respectively. The rainfall distribution was quite adequate and good for rain-fed agriculture and it favoured crop growth and development and harvesting of root crops while it impacted farm weeding in some areas with high distributions. It also favoured rain-harvesting.

2.0 SOIL MOISTURE CONDITION

Fig. 5 below shows the soil moisture indices across the country for dekad and it indicates that the country was under normal to surplus soil moisture conditions except the Sokoto that experienced deficit soil moisture. The moisture condition was quite adequate for rain-fed farming.

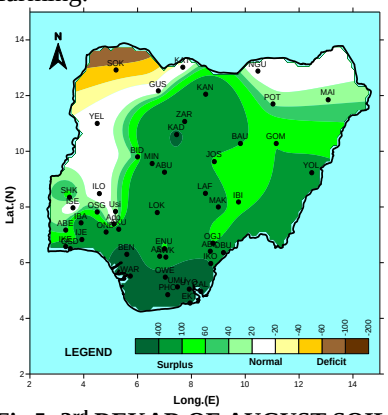


Fig.5: 3rd DEKAD OF AUGUST SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

Fig.6 below shows the maximum temperature anomaly across the country. It indicates that the country, generally experienced normal temperature conditions. However, Sokoto, Zaria, Gusau, Yelwa, Shaki and Abakaliki had warmer than normal temperature.

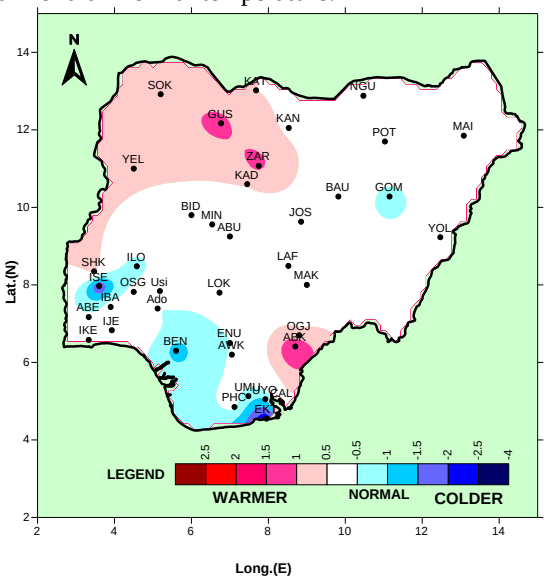


Fig.6: Maximum Temperature Anomaly.

3.2 Maximum Temperature Values.

Fig.7 below shows the actual mean maximum temperature distribution across the country and it reveals that the extreme North of the country recorded maximum temperatures in the range of ***30^0C to 33^0C.*** The Central states had ranges from ***24^0C to 30^0C. S***tations in the southern states recorded ***30^0C*** and below except for Ogoja and Abakaliki that recorded temperatures above ***30^0C. The highest value of 32.5^0C was recorded over Nguru, while Jos recorded the lowest value of 24.6^0C***

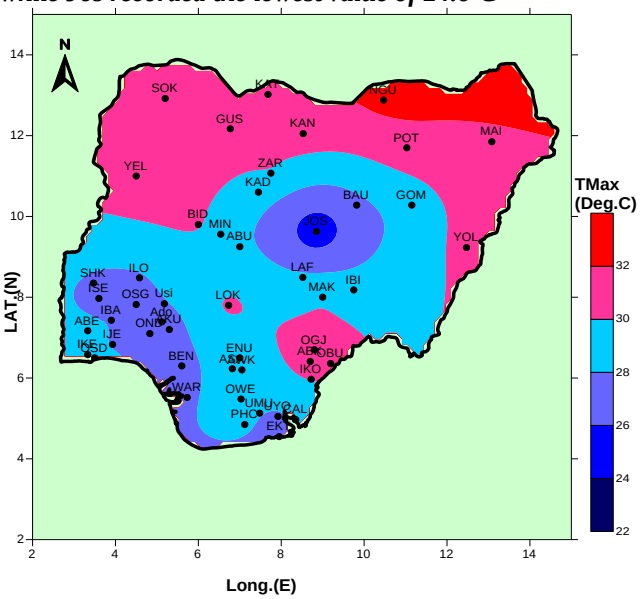


Fig. 7: Mean maximum Temperature

WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 1 (1 TO 10), OF SEPTEMBER, 2014

4.1 Weather Outlook

The Inter Tropical Discontinuity (ITD)'s position is expected to fluctuate between latitudes 17deg. N and 19degN. Cloudy weather conditions with rains and occasional thunderstorms are expected in the northern states of the country. The central states are expected to be cloudy with local thunderstorm/rains while the inland and coastal areas will witness cloudy situations with rains/showers and occasional thunderstorms.

The mean maximum temperatures in the North and the central will range from 28 ^{O}C to 32^{0}C, while the mean minimum temperature will be between 20 ^{O}C and 24^{O}C. In the inland and coastal areas, the mean maximum temperatures are expected to lie between 27^{O}C and 29 ^{O}C, while the mean minimum temperature will range from 21^{O}C to 24^{O}C.

4.2 Agricultural Activity/Outlook

Harvesting of new yam, sweet potatoes, fresh corn and fresh vegetables was the major activity in the South and Central states and would continue. In the North, farmers were engaged in preparation of nurseries for tomatoes and other vegetables, harvesting of fresh vegetables like carrots, cabbage, sweet potatoes, groundnut and fertilizer applications. Farmers are advised to use the NiMet's relevant publications and weather information such as the Drought and Flood Monitor bulletin, dekad agromet bulletin, daily weather information, for improved agricultural yields.

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	GDD	RAD
ABEOK	55.7	5	38.6	28.8	22.9	196.5	15
ABUJA	213.3	5	42.6	28.4	20.8	183	16.9
ABAK	197.2	5	44.3	30.8	23.4	210.2	16.9
AKURE	114.9	9	39.4	27.3	20.7	175.9	15.9
BENIN	210.5	9	33.1	27.5	22.9	188.9	13
BIDA	64.3	5	42.8	30.3	23.1	205.7	16.4
CALABAR	209.2	10	37.2	28.3	21.8	187.7	13
EKET	212.9	11	43.9	27	18.7	163.1	18.1
ENUGU	74.7	7	45.3	29	20.7	185.5	18
GOMBE	85.7	4	42.9	28.8	21.1	186.6	16.9
GUSAU	47.7	5	47.7	30.9	21.8	201.8	18.4
IBADAN	112.1	6	39.1	27.9	21.6	184.5	15.5
IJEBU	73.2	9	36.1	27.8	22.4	188.3	14.2
IKEJA	90.4	6	38.2	28.5	22.6	193	14.9
ILORIN	38.4	4	39.2	27.8	21.3	181.8	15.6
ISEYIN	23.8	4	37.5	26.9	20.9	175	15.1
JOS	73.2	5	41.9	24.6	16	135.2	18.1
KADUNA	260.8	7	46.5	29	20	181.7	18.5
KANO	151.8	7	48.2	31	21.7	201.9	18.6
KATSINA	42.2	3	48.4	31.3	22	205.3	18.5
LOKOJA	157.3	5	43.2	30.3	23	205.2	16.6
MAKURDI	92.7	4	43.4	29.8	22.3	198.5	16.8
MINNA	136.8	5	39.1	28.7	22.4	192.7	15.3
NGURU	52.3	2	53.8	32.5	21.2	207.4	20.5
OGOJA	81.4	6	44.2	30.5	23.1	206.7	16.9
ONDO	110.3	6	37.8	27.6	21.7	183	15
OSHODI	81	6	39.8	29.2	23	198.9	15.4
OSOGBO	60.5	6	37.9	27.4	21.3	179.7	15.1
PHC	239.4	7	38.7	28.4	22.4	191.3	15.2
POT	65	6	47.7	31.3	22.5	208.1	18.2
SHAKI	70.2	3	39.4	27.7	21.2	181.1	15.7
UYO	333.2	8	34.4	27.7	22.8	189.8	13.5
YELWA	47.4	5	46.2	31.5	23.4	214.1	17.4
YOLA	91.9	4	42	30.6	23.9	211.8	15.9
ZARIA	172	6	47.3	29.9	20.8	190.7	18.5
ADO-EKITI	34.8	5	38	27.3	21.2	178.7	15.2
USI-EKITI	60.7	5	48.8	27.9	17.3	160.6	20.2

Note:

RAINFALL (mm)
PET (mm/day)
TMAX (^{O}C)
TMIN (^{O}C)
GDD (day)
RAD (MJ/m^{2}/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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