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SUMMARY

The end of the raining season is already evident in the extreme North of the country with Gombe and Katsina recording zero rainfall. The position of Inter Tropical Discontinuity (ITD) is within the country as it fluctuated between Latitudes 13.5 and 14°N. Generally, there was a reduction in rainfall activity particularly in the North except Ilorin that recorded significant amount of rainfall. The highest rainfall amount was recorded over Benin with 231.4mm in 8 rain-days, followed by Ilorin with 227.2mm in 6 rain-days and Uyo 200.9mm in 8 rain-days. The country experienced increased maximum temperatures with the highest value of 34.4°C as recorded over Sokoto and Jos having the lowest value of 26.9°C. The major agricultural activities included: Continuous harvest of new yams, cassava, sweet potatoes, millet, groundnut, fresh vegetables and corn/maize across the country.

1.0 RAINFALL PATTERN

1.1 Rainfall Anomaly (Deficit / Surplus)

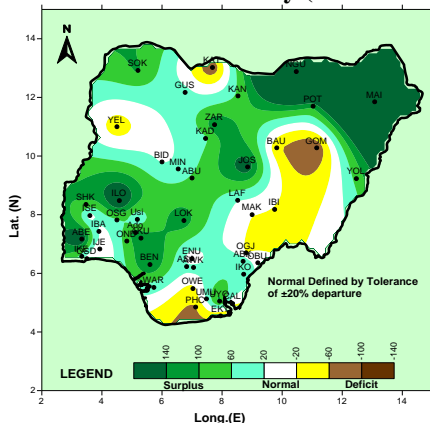
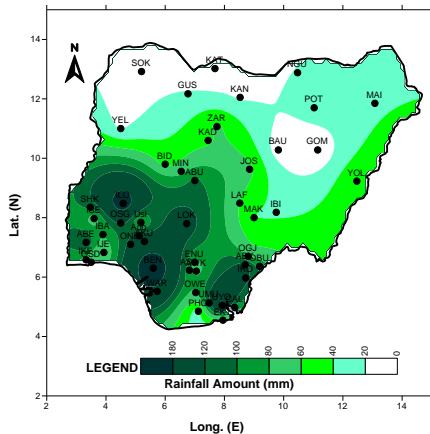


Fig.1: 1st DEKAD OCT, RAINFALL ANOMALIES

The rainfall anomaly over the country reveals that the country generally experienced normal to surplus rainfall anomalies (Fig.1). However, stations like Katsina, Yelwa, Gombe and Port-Harcourt recorded deficit rainfall anomalies when compared with the normal (1981-2010).

Rainfall Amounts



The actual observed rainfall amounts measured over the country for the 1st dekad of October are shown in Fig.2 above and reveals a general reduction in rainfall amounts in the North, except Ilorin when compared with the preceding dekad. The South showed gradual increase in rainfall amounts, particularly the Southwest. **The highest**

rainfall amount was recorded over Benin with 231.4mm in 8 rain-days, followed by Ilorin with 227.2mm in 6 rain-days and Uyo 200.9mm in 8 rain-day. Gombe and Katsina did not report rainfall during the dekad. Farmers in the South should take advantage of this increase in rainfall for all on the farm activities.

1.2 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE 1ST DEKAD OF OCTOBER

Fig.3A and Fig.3B below show 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 respectively. Over the North (Fig.3A), most stations received normal to above normal rainfall except, Bauchi, Gombe, Katsina, and Yelwa that recorded below-normal rainfall. In the South (Fig.3B), the chart revealed that most stations recorded normal to above normal rainfall except Calabar, Eket, Ijebu, Owerri and Port-Harcourt.



1.3 Number of Rain Days.

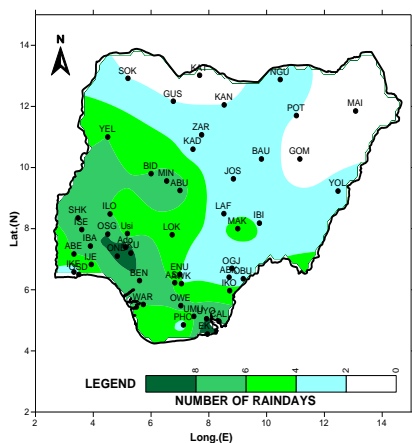


Fig.4: NUMBER OF RAIN DAYS

Fig. 4 above depicts the rainfall distribution across the country and it shows reduction in the number of rain-days in the North that recorded between 0 to 4 rain-days except places like Abuja, Bida, Lokoja, Ilorin, Makurdi, Minna and Yelwa that had more than 4 rain-days. The Southern part of the country recorded 3 to 9 rain-days. The number of rain-days shows the spread of rains and it is great importance to farming activity as it determines the wetness of the field crops for better growth and development.

2.0 SOIL MOISTURE CONDITION

Fig. 5 below shows the soil moisture indices across the country for the dekad and indicates that the country had adequate moisture in most stations of the South that showed normal to surplus soil moisture indices. However, a greater number of stations in North had deficit soil moisture indices. This signifies end of the raining season in the North, that is herald of dry season farming.

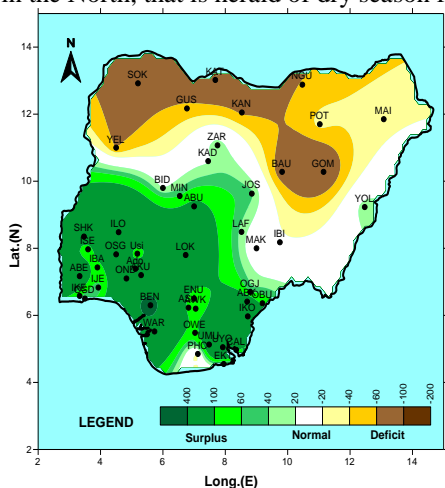


Fig.5: 1st DEKAD OF OCTOBER SOIL MOISTURE INDEX (SMI)

3.0 MAXIMUM TEMPERATURE TREND

3.1 Maximum Temperature Anomaly

Colder-to-normal temperature conditions prevail over the country as shown in Fig.6 below that depicts maximum temperature anomaly. However, stations like Abakaliki, Awka and Port-Harcourt recorded warmer than normal temperature anomaly.

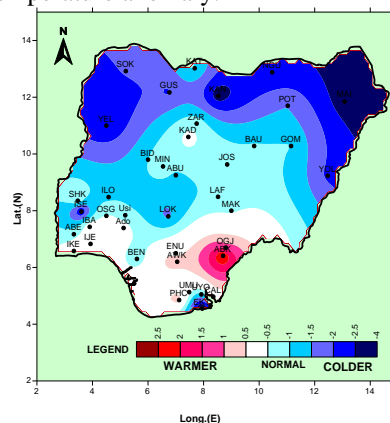


Fig.6: Maximum Temperature Anomaly.

3.2 Maximum Temperature Values.

Fig.7 below shows the actual mean maximum temperature distribution across the country and indicates that most parts of the country had mean maximum temperatures above 30°C except Jos, Eket, Shaki, Iseyin, Oshogbo and Ekiti. The extreme North and Ogoja, Abakaliki, Obudu and Ikom in the South had mean maximum temperature above 32°C. Sokoto and Jos stations recorded the highest and lowest temperature values of 34.4°C and 26.9°C respectively.

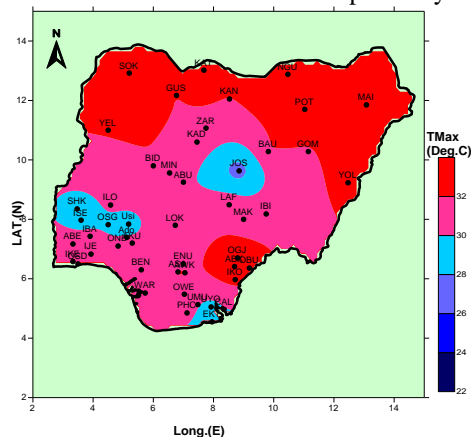


Fig. 7: Mean maximum Temperature

WEATHER/AGRICULTURAL OUTLOOK FOR DEKAD 2 (11 TO 20), OF OCTOBER, 2014

4.1 Weather Outlook

The position of Inter Tropical Discontinuity (ITD) is likely to oscillate between latitudes 12deg. N and 13degN. The northern part of the country is expected to be partly

cloudy and sunny with local rains. The central states are expected to be cloudy/partly with occasional rains/thunderstorms. The inland and coastal areas of the South are likely to experience cloudy weather conditions with rains/showers and localized thunderstorms.

The northern and the central states are expected to have mean maximum temperatures of the range 27 °C - 35 °C, while the mean minimum temperatures will lie between 17 °C and 23 °C. The mean maximum temperatures over the inland and coastal areas of the South are expected to be between 28 °C and 31 °C, while the mean minimum temperatures will range from 21 °C to 24 °C.

4.2 Agricultural Activity/Outlook

Farmers in the South and the central states were engaged in the harvest of new yam, sweet potatoes, fresh corn and fresh vegetables while those of the North continued the preparation of nurseries for tomatoes and other vegetables and also harvesting of fresh maize, sweet potatoes, millet, sorghum, vegetables like carrots, cabbage, groundnut. In order to achieve improved agricultural yields, farmers are advised to apply the information contained in the NiMet's relevant publications and weather information like the Drought and Flood Monitoring bulletin, Dekad Agromet bulletin and daily weather information in their daily farming operations.

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	GDD	RAD
ABEOKUTA	127.1	6	42.8	31	23.3	191.5	17.9
ABUJA	104.6	7	47.4	30.2	19.8	170	20.6
ABAK	133	3	49.7	33.6	23.6	206	20.3
ASAB	89.7	6	49.2	32.1	21.8	189.9	20.6
AWKA	72.4	4	45.3	32.1	23.5	198	18.7
BAUCHI	9.5	4	47.7	31.9	21.9	188.7	20
BENIN	231.4	8	39.7	30.4	23.6	189.8	16.6
BIDA	53.6	6	46.3	31.9	22.7	192.8	19.3
CALABAR	87.8	8	41.9	29.9	22.1	180	17.9
EKET	46.7	10	43.1	27.6	18.6	151.2	19.4
ENUGU	75.8	4	47.3	31.3	21.4	183.5	20.1
GOMBE	0	0	46.3	31.8	22.4	191.4	19.3
GUSAU	21.8	2	47.5	32	22.1	190.7	19.8
IBADAN	78.5	8	43.7	30.5	22.1	183.2	18.5
IJEBU	57.4	5	41.5	30.4	23	186.8	17.5
IKEJA	72.6	3	41.7	30.4	22.9	186.5	17.6
ILORIN	227.2	6	45.1	30.3	21.1	177	19.4
ISEYIN	67.4	6	41	29.1	21.3	171.9	17.8
JOS	67.2	2	45.8	26.9	15.6	132.8	21.4
KADUNA	55.6	3	48.1	31.3	20.9	180.8	20.5
KANO	17.2	2	48.8	31.9	21.1	185.4	20.6
KATSINA	0	0	54	34.2	21.6	199.1	22
LAFIA	59.2	3	44.5	31.4	22.9	191.6	18.6
LOKOJA	136.9	5	42.9	30.8	22.9	188.5	18
MAIDU	36.8	1	51.4	33.7	22.2	199.7	21.2
MAKURDI	39.8	5	44	31.2	22.9	190.3	18.4
MINNA	71.8	7	45.6	31.3	22.2	187.4	19.2
NGURU	21.4	3	51.5	34.3	23	207.8	20.9
OGOJA	70.6	2	47.5	32.8	23.7	202.5	19.5
OSHODI	55.6	4	41.1	30.7	23.4	190.3	17.3
OSOGBO	121.9	8	41.7	29.8	22	178.8	17.8
OWERRI	75.5	7	42.6	30.8	23	189.1	17.9
PHC	31.8	3	44.8	31.2	22.8	190	18.8
POT	34.8	2	52.6	33.6	21.6	196.1	21.8
SHAKI	107.2	7	42	29.3	21.2	172.1	18.2
SOKOTO	16.7	2	52.9	34.4	22.5	204.6	21.6
UYO	200.9	8	39.1	29.2	22.5	179.2	16.7
WARRI	170	6	41.1	31	23.8	193.8	17.1
YELWA	16.7	6	44	32.2	24.1	201.3	18.1
YOLA	60.4	3	46	32.5	23.6	200.6	18.9
ZARIA	64.7	4	47.9	31.5	21.2	183.2	20.3
ADO-EKITI	131.3	9	44.4	30.1	21.3	176.8	19
USI-EKITI	67.9	5	47.1	29.5	19	162.1	20.7

Note:

Rainfall (mm)

PET = Potential Evapotranspiration (mm/day)

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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