

# NIGERIAN METEOROLOGICAL AGENCY

NATIONAL WEATHER FORECASTING AND CLIMATE RESEARCH CENTRE,  
 BILL CLINTON DRIVE, NNAMDI AZIKIWE INTERNATIONAL  
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### SUMMARY

The 3<sup>rd</sup> dekad of November revealed that only six stations in the South recorded rains, further indicating the end of rainy season across over the country. The position of Inter Tropical Discontinuity (ITD) further moved southerly as it oscillated between latitude 6.5<sup>o</sup>N and 7<sup>o</sup>N. Eket station recorded the highest rainfall amount of 77.9mm in 5 rain-days. Other stations with significant amounts were Benin and Uyo with values of 65.1mm in 5 rain-days and 39.0 mm in 2 rain-days respectively. The soil moisture conditions in the country were deficits, except the extreme coastal parts which had neutral to surplus soil moisture conditions, particularly the areas in and around Eket, Uyo, Benin and Ikeja. The Country recorded a slight decreased in maximum temperatures especially over the North due to hazy-weather condition, the highest value of 36.8.<sup>o</sup>C in Yelwa. Planting of dry season crops such as tomatoes, onions, rice and wheat is expected to continue in the extreme northern parts of the country, while processing and packaging of harvested crops for second season farming is expected to continue up to 3rd dekad of December, 2014.

### 1.0 RAINFALL PATTERN

#### 1.1 Rainfall Anomaly (Deficit / Surplus)

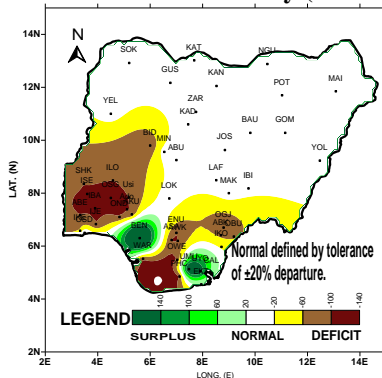
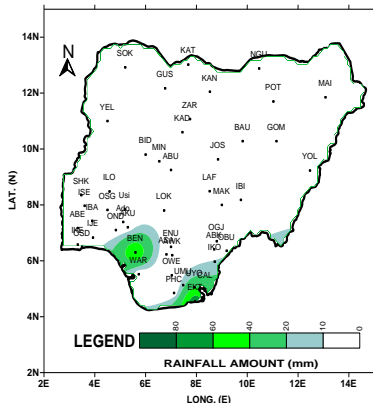


Fig.1: 3RD DEKAD NOV, RAINFALL ANOMALIES

Fig.1 above depicts rainfall anomalies over the country and it shows that most parts of the South had deficit rainfall anomaly except areas like Benin, Eket and Calabar which had surplus. The Northern and Central parts of the country had normal rainfall anomalies.

#### Rainfall Amounts



The actual rainfall amount observed for the dekad is shown Fig.2 above and it indicates that only very few stations in the South recorded rainfall, these include; Eket, Uyo, Benin, Calabar, Ikeja and Oshodi. The highest rainfall amount was recorded over Eket with 77.9mm in

5 rain-days, followed by Benin with 65.1mm in 5 rain-days and Uyo with 39.0mm in 2 rain-days.

#### 1.2 COMPARISON OF NORMAL WITH ACTUAL RAINFALL FOR THE 3RD DEKAD OF NOVEMBER

Fig.3 below shows the comparison of the actual rainfall amounts measured and normal/long term averages during the dekad over the southern parts of the country. It shows that the few stations that reported rains had above normal rainfall, except Ikeja.

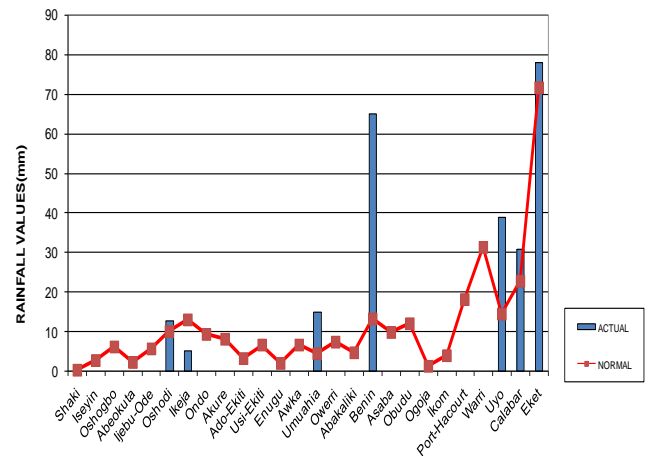
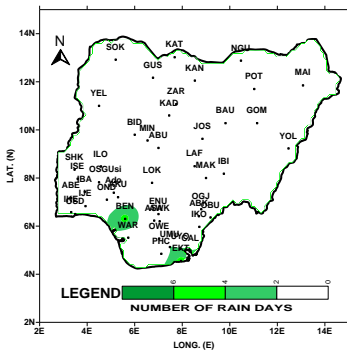


FIG. 3: COMPARISON OF NORMAL WITH OBSERVED RAINFALL OF DEKAD 3 NOVEMBER 2014: FOR SOUTHERN STATES OF NIGERIA.

### 1.3 Number of Rain Days.

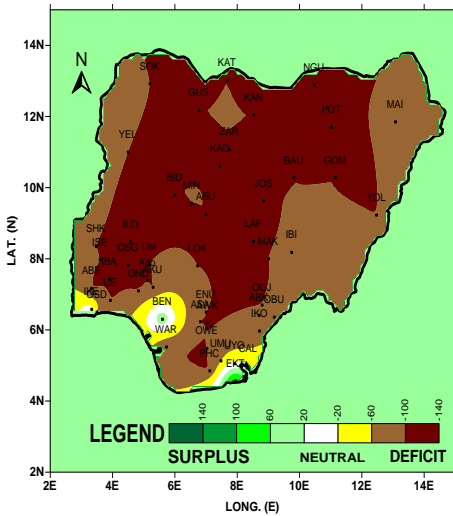


**Fig.4: NUMBER OF RAIN DAYS**

*Fig.4* above shows the distribution of rainfall over the country and it indicates that the North and the central states recorded zero (0) number of rain-days. The stations in the South recorded 1 to 2 rain-days, except Eket and Benin that had 5 rain-days.

### 2.0 SOIL MOISTURE CONDITION

*Fig.5* below shows the soil moisture indices across the country for the dekad and it reveals that the country had deficit soil moisture conditions, except the coastal areas of the southern part which had neutral to surplus soil moisture conditions.

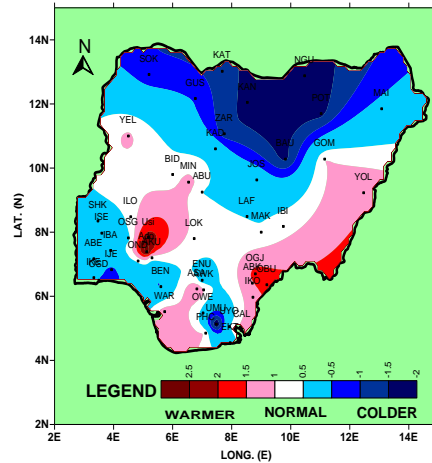


**Fig.5: 3RD DEKAD OF NOVEMBER SOIL MOISTURE INDEX (SMI)**

### 3.0 MAXIMUM TEMPERATURE TREND

#### 3.1 Maximum Temperature Anomaly

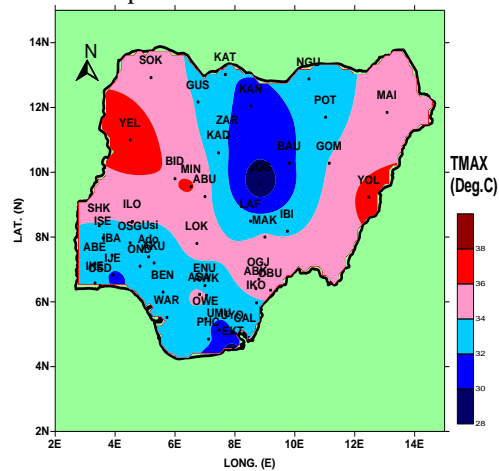
A maximum temperature anomaly over the country is shown in *Fig.6* below and it indicates that the country was under normal to colder than normal maximum temperature anomalies, except parts of Yola, Ogoja and Akure that were warmer than normal.



**Fig.6: Maximum Temperature Anomaly.**

#### 3.2 Maximum Temperature Values.

Actual mean maximum temperature distribution across the country is depicted in *Fig.7* below and indicates that the country had mean maximum temperatures below  $35^{\circ}C$  except some stations in the central and the northern states like Sokoto, Yelwa, Bida, Minna and Yola which had mean maximum temperature above  $35^{\circ}C$ . Jos recorded the lowest temperatures of  $28.2^{\circ}C$ .



**Fig. 7: Mean maximum Temperature**

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

#### 4.1 Weather Outlook

The Inter Tropical Discontinuity (ITD) movement is likely to fluctuate between latitudes 6.5deg.N and 7degN. The expected weather condition over the North is sunny and hazy while the central states are likely to be partly cloudy and sunny. Cloudy/partly weather conditions are expected over the Inland and coastal areas of the South with occasional rains.

The expected mean maximum temperatures across the northern and central states will be between  $32^{\circ}C$  and  $34^{\circ}C$ , while the mean minimum temperatures will range from  $18^{\circ}C$  to  $20^{\circ}C$ . The mean maximum temperatures over the inland and coastal areas of the South are expected to range from  $30^{\circ}C$  to  $32^{\circ}C$ , while the mean

minimum temperatures are expected to be between 20°C and 22°C.

#### 4.2 Agricultural Activity/Outlook

Planting of dry season crops such as tomatoes, onions, wheat and rice is expected to continue in the extreme

northern parts of the country especially places with irrigation projects, while in the southern parts packaging and processing of harvested crops for the second season farming are expected to also continue in the 3rd dekad of December.

**TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD**

STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	GDD	RAD
ABEOKUTA	0	0	45.5	33.6	24.6	210.9	18.4
ABUJA	0	0	58.4	34.6	18.3	184.6	24.7
ASABA	0	0	51.9	34.6	22.9	207.3	21.1
AKURE	0	0	49	32.7	21.6	191.6	20.5
AWKA	0	0	49.4	34.0	23.3	206.7	20.1
BAUCHI	0	0	52.1	31.6	17.4	165	22.9
BENIN	65.1	5	43.4	32.0	23.5	197.6	17.9
BIDA	0	0	56.4	35.9	21.8	208.5	22.9
CALABAR	30.9	2	44.7	32.1	23.0	195.3	18.6
EKET	77.9	5	34.1	29.0	23.5	182.5	14.5
ENUGU	0	0	50	33.0	21.5	192.2	20.9
GOMBE	0	0	52.5	34.1	21.4	197.2	21.7
GUSAU	0	0	57.7	33.8	16.7	172.6	25
IBADAN	0	0	45.4	33.0	23.9	204.5	18.5
IJEBU	0	0	40.7	31.7	24.2	199.3	16.8
IKEJA	5.1	1	XX	32.1	XX	XX	XX
ILORIN	0	0	52.3	34.4	22.0	201.8	21.5
ISEYIN	0	0	46.1	32.1	22.3	192.3	19.2
JOS	0	0	52	28.2	11.5	118.6	25
KADUNA	0	0	57.5	33.0	15.6	162.9	25.3
KANO	0	0	60.1	31.5	9.2	123.9	28.6
KATSINA	0	0	54.6	32.2	16.2	161.7	24.1
LAFIA							
LOKOJA	0	0	53.4	34.8	22.2	205.2	21.8
MAKURDI	0	0	58.1	34.3	18.0	181.2	24.8
MINNA	0	0	59.6	36.3	20.2	202.3	24.5
NGURU	0	0	58.8	33.0	13.9	154.2	26.3
OGOJA	0	0	49.9	34.8	24.2	214.6	20
OSHODI	12.8	1	42.9	32.4	24.0	201.8	17.6
OSOGBO	0	0	46.3	32.6	22.8	197.3	19.2
OWERRI	0	0	47.4	33.0	22.9	199.2	19.6
PHC	0	0	47.1	32.6	22.6	196	19.5
POT	0	0	56.8	33.0	16.0	164.6	25
SHAKI	0	0	51.3	33.9	22.0	199.3	21.2
SOKOTO	0	0	59.3	35.3	18.2	187.7	25
UYO	39	2	43.7	32.1	23.6	198.5	18
WARRI	0	0	46.5	33.9	24.6	212.4	18.7
YELWA	0	0	64.1	36.8	17.3	190.3	26.8
YOLA	0	0	61.5	36.7	19.7	201.7	25.2
ZARIA	0	0	54.5	32.0	16.3	161.5	24.1
ADO-EKITI	0	0	50.4	32.9	21.1	190.1	21.1
USI-EKITI	0	0	57.4	32.3	14.6	154.5	25.8

Note:  
 Rainfall (mm)  
 PET = Potential Evapotranspiration (mm/day)  
 TMAX = Maximum Temperature (°C)  
 TMIN = Minimum Temperature (°C)  
 GDD = Growing Degree Day (day)  
 RAD = Radiation (MJ/m<sup>2</sup>/day)

Dear All,  
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