

Summary

The 1st dekad of agrometeorological bulletin of January, 2017 is presented in this edition. The country recorded localised rainfall across the south-south and south-west while the northern cities had no rainfall recorded. Rainfall distribution increased slightly (1-4 rain-days) across some parts of the south-south and south-west when compared with preceding dekad. The entire country experienced below normal soil moisture conditions. The mean maximum temperature increased slightly across the country and the highest maximum temperature was recorded at Yola and Yelwa with (40.9^oC) each while, the mean minimum temperature across the country was observed at Dutse (15.2^oC). The temperature anomaly showed that warmer-than-normal temperature anomalies prevailed across the country except areas in and around Eket which had colder-than-normal temperature anomalies. The Inter Tropical Discontinuity (ITD) is expected to continue northward movement to attain its mean position of 9.0^oN. Harvesting of cereals crops, drying of products and dry season farming are expected to continue in the country particularly in the North.

1.0 Rainfall Pattern

This section highlights the observed rainfall amount, rain-day, available soil moisture and their departures from 30-year average for the 1st dekad of March, 2017.

1.1 Rainfall Amount

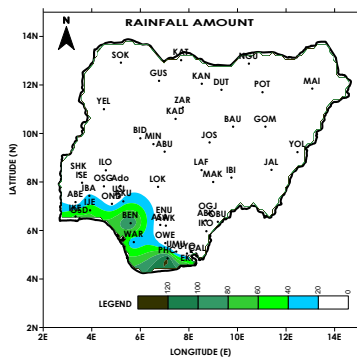


Fig 1: Rainfall Amount (mm)

The observed rainfall amount measured over the country for the 1st dekad of March, 2017 is shown in figure 1. Localised rainfall was observed in most parts of the South particularly in the south-south and south-west however, rainfall was not recorded in the northern states. Farmers around the country especially over the northern and some parts of southern states are advised to continue irrigation/dry season farming.

1.2 Rainfall Departure.

Figure 2 displays the rainfall departure during the 1st dekad of March, 2017. Rainfall departure was normal to below normal over most parts of the country except some parts of areas in and around south-south and south-west which recorded above normal conditions.

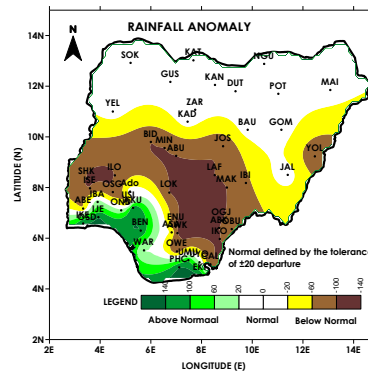


Fig 2: Rainfall Departure

1.3 Number of Rain Days

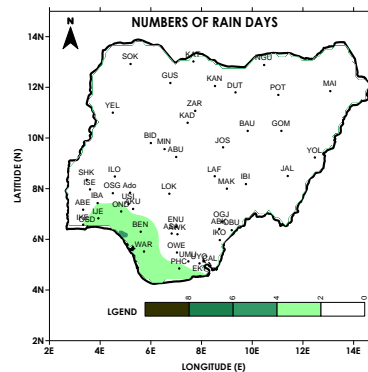


Fig.3: Rain- Day

The number of rain days is shown in figure 3. The distribution of rain-days showed that part of south-west and south-south had 1-4 rain-days with only Ummuhia recording a single rain day in the south-east while other areas were dry during the dekad.

1.4 Soil Moisture Index

The distribution of available soil moisture across the country is shown in figure 4. The entire country experienced below normal soil conditions except areas in and around Benin and Port harcourt. Therefore, farmers are advised to apply irrigation to supplement the agricultural activities.

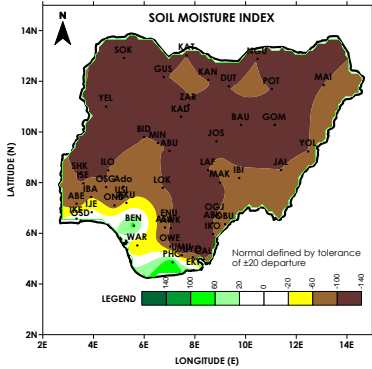


Fig 4: Soil Moisture Index (SMI).

2.0 Temperature Trend

This section highlights the maximum and minimum temperature trends across the country and their departures from 30-year average during the dekad.

2.1 Maximum Temperature Trend

Figure 5 shows mean maximum temperature for the dekad. The mean maximum temperature increased slightly across the country particularly over the northern cities. Highest Maximum temperature was recorded at Yola and Yelwa with same value (40.9°C).

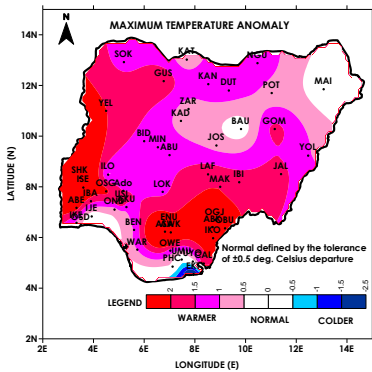


Fig.5: Mean Maximum Temperature

2.2 Maximum Temperature Departure

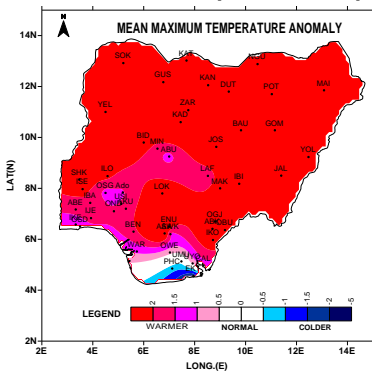


Fig. 6: Maximum Temperature Anomaly.

Maximum temperature anomaly across the country is shown in figure 6. Most parts of the country experienced warmer-than-normal temperature anomalies except areas in and around, Eket which had colder-than-normal temperature anomalies while Maiduguri and Bauchi experienced normal condition.

2.3. Minimum Temperature

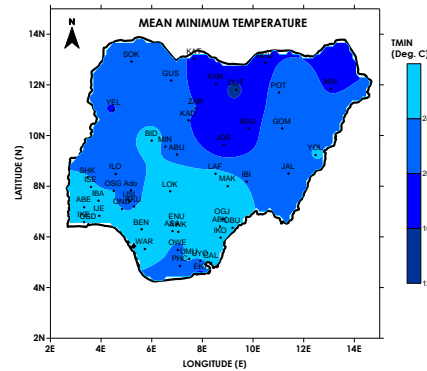


Fig.7: Mean Minimum Temperature

Mean minimum temperature across the country is shown in figure 7. The lowest value was recorded at Dutse (15.2°C).

2.4 Minimum Temperature Departure

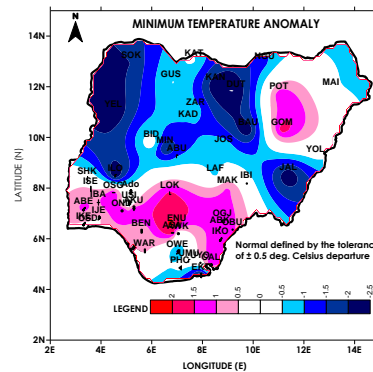


Fig.8: Mean Minimum Temperature Departure

The minimum temperature departure is shown in figure 8 and it revealed that most parts of the country experienced colder-than-normal night time temperatures whereas areas in and around Gombe, Potiskum Lokoja, Ikom Ogoja, Enugu, Awka, Ibadan, Abeokuta and Ondo experienced warmer-than-normal temperature anomaly. Ibi, Usi-Ekiti, Yola, Maiduguri and Iseyin experienced normal temperature anomalies.

3.0 Vegetation Conditions

No available data for the dekad under review.

4.0 Weather/Agricultural Outlook for 2nd dekad (11-20), March, 2017.

4.1 Weather Outlook

The Inter-Tropical Discontinuity (ITD) is expected to continue its north ward movement to attain a mean position of 9.0°N.

The North and Central states have prospects of sunny and dryweather conditions while the Southern cities will be cloudy to partly cloudy in the morning with prospects of localised rain around the coastal cities.

4.2 Agricultural Activity

The drying of agricultural produce across the country harvesting of cereals crops as well as continuation of dry season farming are expected to continue.

TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	DD	RADIATION
ABEOK	4	1	60.4	37.9	26.3	240.7	22.1
ABUJA	0	0	60.1	38.3	22.8	225.5	25.4
BENIN	108.3	4	60.5	35.1	24.8	219.3	20.8
CALABAR	0	0	60.7	34.7	25.3	220.2	19.8
ENUGU	0	0	60.5	37.4	26.2	238.0	21.6
IKEJA	64.1	2	60.5	34.0	25.5	217.4	18.8
ISEYIN	0	0	60.3	37.6	24.5	230.7	23.4
JOS	0	0	60.0	32.2	16.1	161.8	25.9
KADUNA	0	0	59.8	36.8	20.1	204.6	26.2
KANO	0	0	59.5	37.9	17.4	196.6	28.9
MAKURDI	0	0	60.3	39.4	26.7	250.7	23.2

MINNA	0	0	60.0	39.4	23.0	232.2	26.1
WARRI	22.9	3	60.6	34.6	25.2	218.9	19.9
UMUAHIA	2.5	1	60.6	35.0	24.6	217.6	20.9
SOKOTO	0	0	59.3	39.9	21.9	228.9	27.1
YELWA	0	0	59.7	40.9	19.7	223.3	29.5

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)

Kindly send feedback to:

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