

**Agrometeorological Bulletin No. 01, Dekad 1, January (01 –10) 2018**

ISSN: 2315-9790

**Summary**

The 1<sup>st</sup> dekad of January, 2018 agrometeorological bulletin shows no rainfall data recorded during the dekad. The highest maximum temperature was recorded at Abakaliki (**35.1°C**) while, the lowest mean minimum temperature across the country was observed at Usi-Ekiti (**9.4°C**). The temperature anomaly showed most parts of the country experienced normal to cooler-than-normal temperature except some areas around south-west, south-south and south-east that had warmer than normal temperatures. The Inter Tropical Discontinuity (ITD) is expected to continue southward movement to attain a mean position of 7.0°N.

**1.0 Rainfall Pattern**

No rainfall data recorded during the 1<sup>st</sup> dekad of January, 2018.

**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**

The figure below shows the day time mean maximum temperature for 1<sup>st</sup> dekad of January, 2018. The highest maximum temperature was recorded at Abakaliki with value of **35.1°C**.

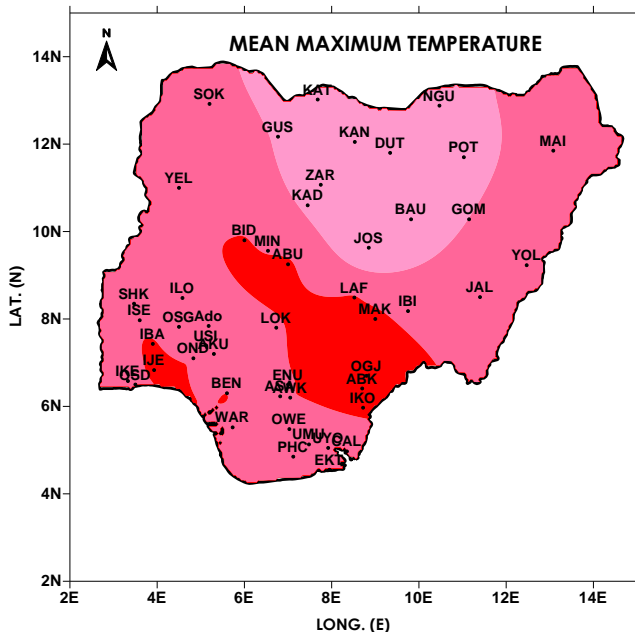


Fig.1: Mean Maximum Temperature

**2.2 Maximum Temperature Departure**

Figure 2 shows the maximum temperature departure from normal across the country for the dekad under review. Most parts of the country experienced normal to cooler-than-normal temperature anomalies with the exception of some areas around south-west, south-south and south east that had warmer than normal temperatures.

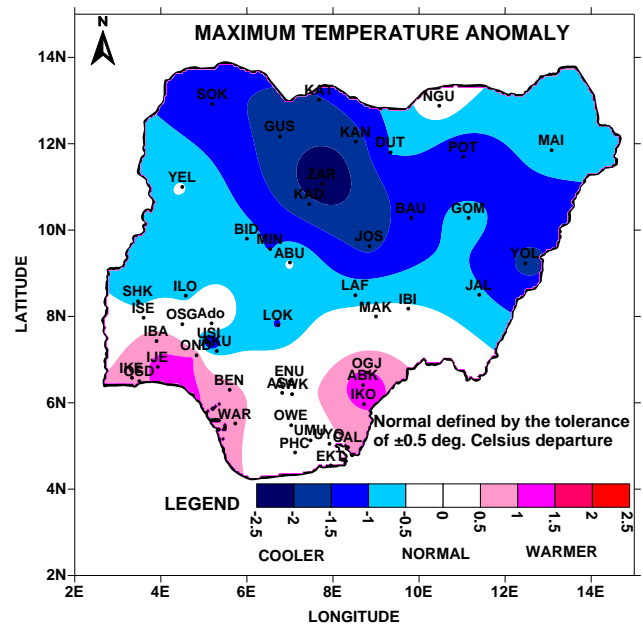


Fig. 2: Maximum Temperature Anomaly.

**2.3. Minimum Temperature**

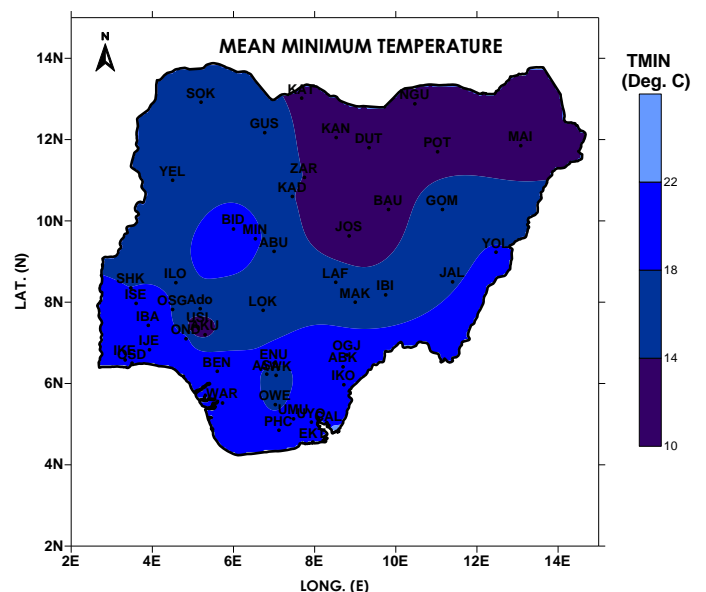


Fig.3: Mean Minimum Temperature

Mean minimum temperature across the country is shown in figure 3. The night time temperature ranged from **23.3°C** to **9.0°C**, and the lowest value was recorded at Usi-Ekiti (**9.0°C**).

## 2.4 Minimum Temperature Departure

The night time minimum temperature departure from normal for the 1<sup>st</sup> dekad of January, 2018 is shown in figure 4 and it revealed that most parts of the country experienced normal to cooler than normal night time temperatures, except Gombe and Yola that experienced warmer-than-normal night time temperatures.

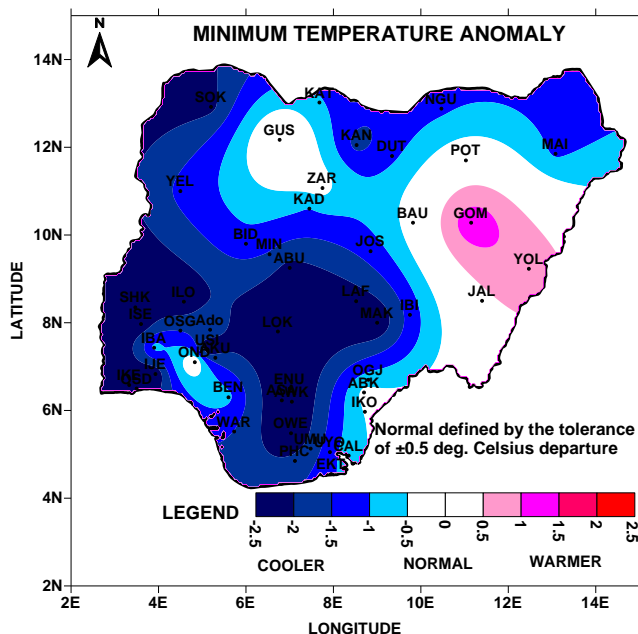


Fig.4: Mean Minimum Temperature Departure

## 3.0 Agricultural Stress Index (ASI)

First Dekad

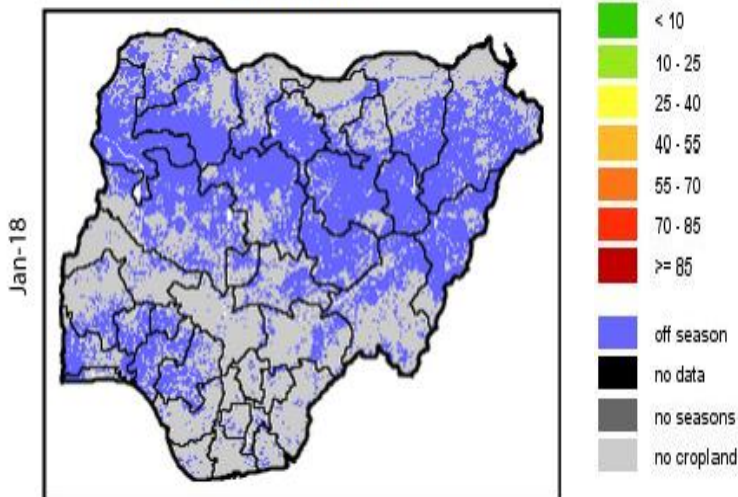


Figure 5 shows the Agricultural Stress Index (ASI) based on FAO 2018 integration of the Vegetation Health Index (VHI). The ASI across the country shows crop stresses due to off season and no cropland in the field for the 1<sup>st</sup> dekade of January 2018.

## 4.0 Weather/Agricultural Outlook for 2<sup>nd</sup> dekade (11-20) of January, 2018.

### 4.1 Weather Outlook

The Inter-Tropical Discontinuity (ITD) is expected to continue its southward movement to attain a mean position of 7.0°N.

The North and Central states have prospects of Dust haze conditions.

The inland of the southern cities will be hazy in the morning while the coastal states will be cloudy to partly cloudy in the morning with prospects of localised rainfall around the coastal cities in the afternoon hours.

### 4.2 Agricultural Activity

Harvesting of rain fed corn (second harvest), fibers and vegetables across the country are expected to continue.

## TABLE OF AGROMETEOROLOGICAL DATA FOR THE DEKAD

STATION	RAINFALL	RAINDAY	PET	TMAX	TMIN	DD	RADIATION
ABEOKUTA	0.0	0.0	57.2	36.0	21.5	207.2	23.3
ABAKALIKI	0.0	0.0	56.1	35.1	20.8	199.3	23.1
ABUJA	0.0	0.0	60.3	34.5	16.2	173.5	26.1
ADO-EKITI	0.0	0.0	56.0	33.2	17.5	173.4	24.2
AWKA	0.0	0.0	58.9	34.0	16.8	174.1	25.4
BENIN	0.0	0.0	52.1	34.0	21.8	199.0	21.5
BIDA	0.0	0.0	54.6	34.2	20.0	190.9	22.8
CALABAR	0.0	0.0	48.4	32.7	22.0	193.3	20.2
DUTSE	0.0	0.0	49.4	28.1	12.6	123.3	23.6
EKET	0.0	0.0	37.3	29.9	23.3	185.7	15.8
ENUGU	0.0	0.0	56.3	33.9	18.5	181.9	24.0
GOMBE	0.0	0.0	50.5	30.0	15.7	148.7	22.9
GUSAU	0.0	0.0	49.8	29.8	15.4	145.8	22.6
IBADAN	0.0	0.0	52.8	34.1	21.4	197.2	21.8
IJEBU	0.0	0.0	56.1	34.2	19.4	187.7	23.6
IKEJA	0.0	0.0	51.8	33.5	20.9	192.0	21.7
ILORIN	0.0	0.0	55.3	32.9	17.5	172.1	24.0
ISEYIN	0.0	0.0	55.3	33.9	19.3	186.0	23.3
JOS	0.0	0.0	48.8	26.2	10.2	101.7	24.3
KADUNA	0.0	0.0	50.9	29.4	14.1	137.5	23.5
KANO	0.0	0.0	48.7	27.3	12.1	116.9	23.5
LAFIA	0.0	0.0	59.2	34.3	16.9	175.7	25.5

LOKOJA	0.0	0.0	57.7	33.8	17.2	175.0	24.9
MAIDU	0.0	0.0	55.7	30.6	11.8	132.1	26.1
MAKURDI	0.0	0.0	61.3	34.8	15.8	172.8	26.5
MINNA	0.0	0.0	55.5	33.8	18.8	183.3	23.6
NGURU	0.0	0.0	52.4	29.8	12.8	133.0	24.5
ONDO	0.0	0.0	55.5	33.9	19.3	185.5	23.4
OWERRI	0.0	0.0	56.6	33.4	17.4	173.9	24.5
POT	0.0	0.0	51.7	29.3	12.8	130.5	24.3
SHAKI	0.0	0.0	54.0	32.6	18.0	172.7	23.3
SOKOTO	0.0	0.0	52.8	30.7	14.7	147.1	23.9
USI-EKITI	0.0	0.0	60.3	31.2	9.0	121.3	28.8
YELWA	0.0	0.0	59.8	33.8	14.7	162.7	26.4
YOLA	0.0	0.0	53.1	32.8	18.4	175.9	22.8
ZARIA	0.0	0.0	47.3	27.6	14.0	127.9	22.3

**Note:**

Rainfall (mm)

PET= Potential Evapotranspiration (mm/decade)

TMAX = Maximum Temperature (°C)

TMIN = Minimum Temperature (°C)

GDD= Growing Degree Day (day)

RAD = Radiation (MJ/m<sup>2</sup>/day)

**Kindly send feedback to:  
The Director-General/CEO,  
Nigerian Meteorological Agency (NiMet),  
National Weather Forecasting and Climate  
Research Centre, NnamdiAzikiwe International  
Airport, PMB 615 Garki, Abuja.**