# JANUARY 2025

# CLIMATE BULLETIN





DEKAD 1, JANUARY (1-10) GMET/CLIMATE/010125

FORM190

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: Ghana Met 1/1/2025

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#### 1.0 SUMMARY

### Rainfall:

- Most areas received no rainfall.
- Axim received the highest rainfall of 47.2 mm.
- Forest zone: Highest rainy days (1 day).
- Transition area to northern parts: Least or no rainy days.

#### **Rainfall Anomalies:**

- Normal to surplus rainfall in most areas in the forest zones, West Coast (Axim and Takoradi), East Coast and Coastal Savanna (Akatsi, Ho)
- o Few stations in the transition (Wenchi, Kete Krachi Kintampo), Upper West and Upper East received deficit rainfall.

## **Relative Humidity:**

- Maximum value of 77% was recorded over Saltpond.
- Minimum value of 18% was recorded over Bole.

### **Temperatures:**

#### **Maximum:**

- Above normal anomalies in Northern and Transition zones.
- The maximum of the Maximum temperature of 37.11.0°C was recorded in Pong Tamale.
- Relatively cooler temperatures along the coast and moderate temperatures in the middle belt and some forested areas.

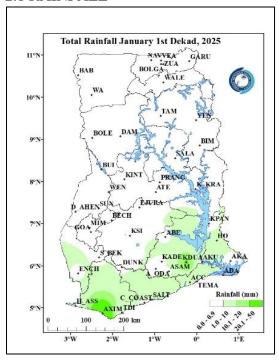
#### Minimum:

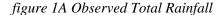
- Warmer in the eastern flanks, East coast and some parts of the middle belt.
- Cooler in Northwestern regions and certain forested areas
- The lowest minimum temperature was recorded in Pong\_Tamale in the Northern zone, reaching 18.94°C.

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### 2.0 RAINFALL, TEMPERATURE AND RELATIVE HUMIDITY DISTRIBUTIONS

#### 2.1 RAINFALL





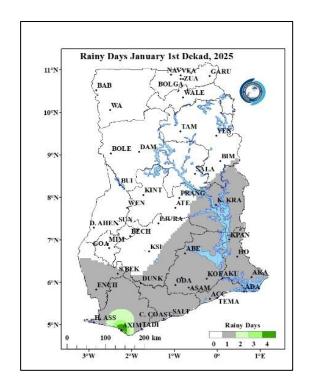


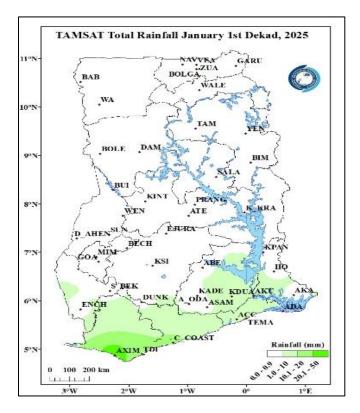
figure 1B Observed Rainy Days

Figure 1a above, illustrates the rainfall distribution across Ghana during the first ten-day period of January. The Southern stations, Axim and Koforidua recorded the highest rainfall amounts, with totals of 47.2mm and 22mm respectively. In contrast, some Northern and Southern areas including Wa, Tamale, Babile, Bolgatanga, Abetifi, Atebubu, Dunkwa and Kete Krachi, experienced no rainfall during the period.

Figure 1b above, illustrates the frequency of rainy days during the specified period. The region spanning from the transitional zone to the Northern areas experienced comparatively fewer or no rainy days, with less than 2 days of rain. The forested areas like Axim saw the most rainfall, with up to 4 rainy days recorded.

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In figure 1c, the total rainfall derived from TAMSAT rainfall estimate is also presented. The satellite data performed well over the period and was able to capture the highest and lowest rainfall amounts over the designated sectors and zones of the country

Figure 1C: TAMSAT Total Rainfall

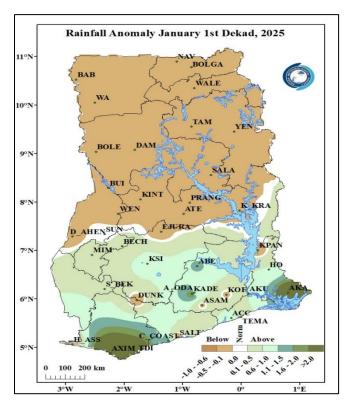
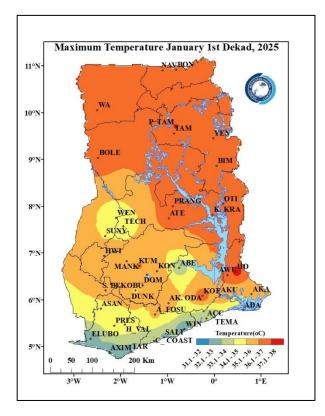


Figure 2: Rainfall Anomaly for January 1st Dekad, 2025

Figure 2 also highlights areas with deviations from normal rainfall. The North to most part of the transition observed deficit rainfall. Most areas in the middle belt to the forest zones of the country experienced normal to a little surplus rainfall condition. However, Axim in the West Coast observed normal to surplus rainfall.

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#### 2.2 TEMPERATURE



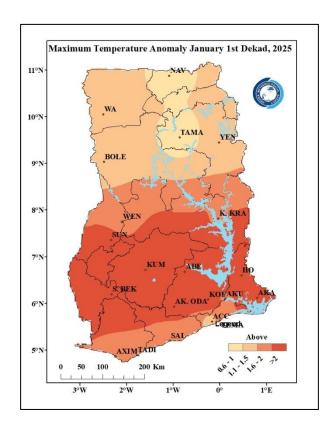
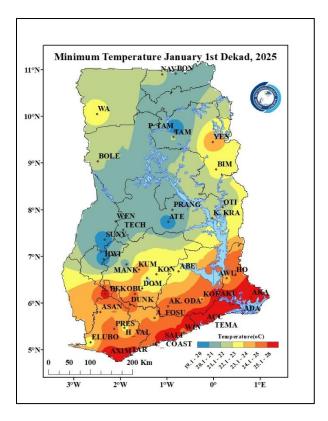


Figure 3A. Maximum Temperature

Figure 3B. Maximum Temperature Anomaly

Figure 3a above displays the distribution of average Maximum temperatures across the country. The northern belt recorded higher temperatures, ranging from 35.45°C to 37.11°C. The highest temperature of 37.11°C was recorded in Prong Tamale, while the lowest temperature of 31.92°C was observed in Axim. In the transition zone, temperatures ranged between 34.37°C and 36.5°C. In contrast, the southern sector, including Abetifi, Accra, Elubo, Tarkwa, Saltpond, and Axim experienced relatively cooler temperatures ranging from 31.0°C to 33.0°C. Temperature were relative cooler during this Dekad.

Maximum Temperature Anomaly is represented in *figure 3b* above. It is evident that, almost the entire country experienced above normal temperatures indicating increasing daytime temperatures.



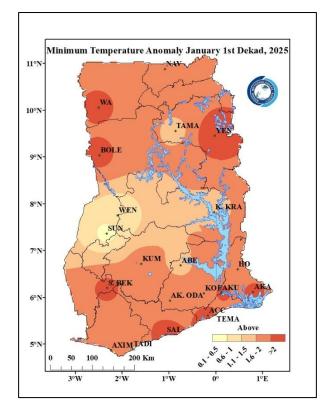


Figure 4A. Minimum Temperature

Figure 4B. Minimum Temperature Anomaly

In *Figure 4a above*, the average minimum temperatures varied across different regions. The coastal zones experienced relatively warmer temperatures, with average values ranging from 24.1°C to 28.0°C. In contrast, forest, and northern areas such as Sunyani, Wenchi, Hweidiem, Bole and Navrongo experienced cooler average nighttime temperatures ranging from 19.1°C to 21.0°C. The lowest average nighttime temperature was recorded in Pong Tamale in the northern zone, reaching 19.1°C.

In *figure 4b above*, we see the Minimum Temperature Anomaly. Again, the entire country experienced above normal temperatures indicating increased nighttime temperatures during the period.

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 *Figure 5* below provides a visual representation of distribution patterns for Maximum and Minimum temperature for the first Dekad of January 2025 as also shown in figures 3a and 4a above.

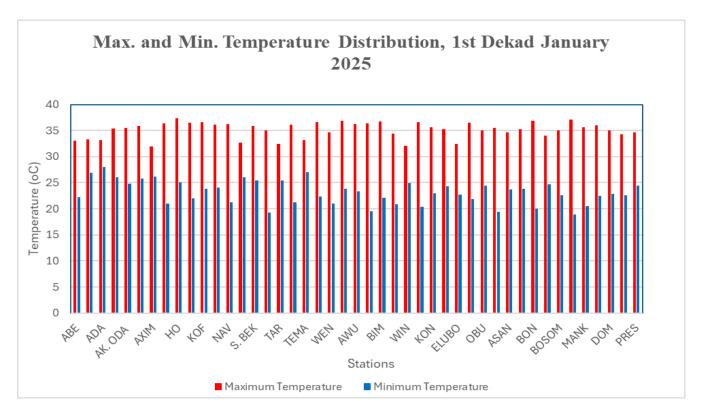


Figure 5. Max. and Min. Temperature Distribution for January 1st Dekad, 2025.

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### 2.3 RELATIVE HUMIDITY

Observed Relative Humidity (RH) over the ten (10) day period is presented in *figure 6a* below. The forest and coastal areas experienced RH of 60 to 80%. On the other hand, the Transition and Northern areas experienced RH values ranging from 15 to 50 %. The minimum value of 18% was recorded over Bole while a maximum value of 77% was recorded over Saltpond.

Average RH Anomaly is also presented in *figure 6b below*. Generally, a below normal RH is observed over almost the entire country. This can be attributed to the above normal conditions for maximum and minimum temperature and the deficit in total rainfall observed for most areas of the country. Areas around Yendi, however, experienced an above normal RH.

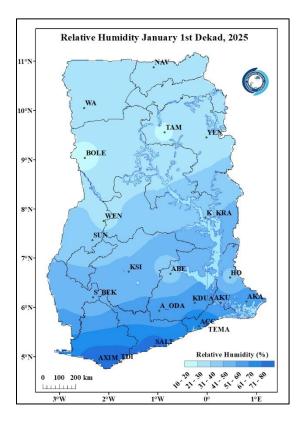


Figure 6A. Average Relative Humidity

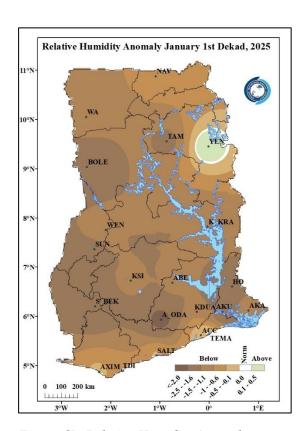
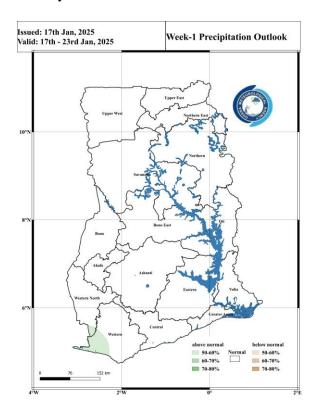
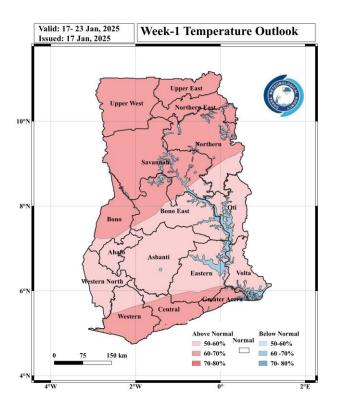


Figure 6B. Relative Humidity Anomaly

# 3.0 RAINFALL AND TEMPERATURE OUTLOOK FROM 17th JANUARY TO 23rd JANUARY 2025

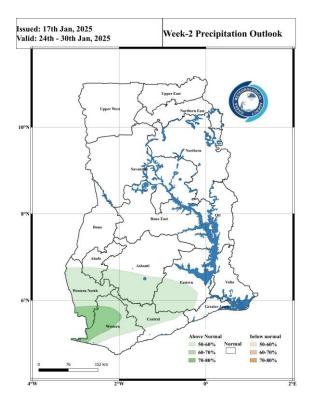
In week one above normal rainfall is expected over the western portions of the Western Region and the southern portions of the Western North Region, above normal temperatures are expected over the entire country

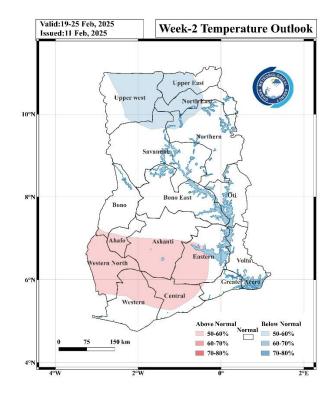




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In week two above normal rainfall is expected over the central and western portions of the Forest Zone with the rest of the country expected to have normal conditions, and above-normal temperatures are expected across the Northern Sector and parts of the Transition Zone.





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### 4.0 ADVISORIES

#### 1. Health Sector

- Increased temperatures may lead to dehydration and heat stress.
- Be cautious of heat-related illnesses, especially for vulnerable groups (elderly, children, and those with chronic illnesses) due to high daytime temperatures particularly in the Northern belt.

# 2. Water Resources Management Sector

o Conserve water and use it efficiently, especially in regions with no rainfall (Northern sector).

### 3. General Public

- o Above-Normal Temperatures (Nationwide). The general public should limit outdoor activities during peak heat hours (11 am to 4 pm).
- The use of fans or air conditioning where available to stay cool
- o Stay hydrated, avoid prolonged sun exposure, and wear light clothing.
- o Stay updated on weather forecasts from the Ghana Meteorological Agency.

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# **5.0 APPENDIX:**

# 5.1 LIST OF TABLES

			1		
STATIONS	Abrevation	STATIONS	Abrevation	STATIONS	Abrevation
Abetifi	ABE	Bui	BUI	Salaga	SALA
Accra	ACC	Cape Coast	C. COAST	Saltpond	SALT
Ada	ADA	Damongo	DAM	Sefwi Bekwai	S. BEK
Agona Kwanyako	AG. KWA	Dorma Ahenkro	D. AHEN	Sefwi Wiawso	S. WIAW
Agona Swedro	AG. SWE	Duayaw Nkwanta	D. NKWA	Sunyani	SUNY
Akatsi	AKA	Dunkwa	DUNK	Techiman	TECH
Akim Oda	AK. ODA	Goaso	GOA	Tafo	TAFO
Akropong Akwapim	A. Akwap	Но	НО	Takoradi	TADI
Akuse	AKU	Kade	KADE	Tamale	TAMA
Asamankese	ASAM	Kete Krachi	K. KRA	Tarkwa	TARK
Asankragwa	ASANK	Kintampo	KINT	Tema	TEMA
Atebubu	ATE	Koforidua	KOF	Twifo Praso	T. PRA
Atieku	ATIEKU	Kpando	KPAN	Vea Dam	VEA
Axim	AXIM	Kumasi	KSI	Wa	WA
Babile	BABILE	Manga Bawku	M. BAWKU	Walewale	WALE
Bechem	BECH	Mim	MIM	Wamfie	WAMF
Bibiani	BIB	Navrongo	NAV	Wassaw Akropong	W. AKR
Bimbila	BIMB	Nsoatre	NSOA	Wenchi	WEN
Bole	BOLE	Obuasi	OBUASI	Winneba	WINN
Bolgatanga	BOLGA	Pong Tamale	P. TAM	Yendi	YEN
Bompata	ВОМРА	Prang	PRANG	Zuarungu	ZUA
Breman Asikuma	B. ASIK				

For further inquiries, clarification, information or assistance **Contact:** 

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