

JUNE 2025

# CLIMATE BULLETIN



DEKAD 1, JUNE (1-10)

GMET/CLIMATE/010625

6/1/2025

FORM337

## TABLE OF CONTENT

SUMMARY .....	1
1.0 OBSERVED CLIMATE DRIVERS.....	2
1.1 INTERTROPICAL FRONT .....	2
1.2 MADDEN-JULIAN OSCILLATION (MJO).....	3
2.0 RAINFALL, TEMPERATURE AND RELATIVE DISTRIBUTION.....	5
2.1 RAINFALL.....	5
2.2 TEMPERATURE .....	8
2.3 RELATIVE HUMIDITY .....	11
3.0 RAINFALL AND TEMPERATURE OUTLOOK 11- 24 <sup>TH</sup> JUNE 2025.....	12
4.0 ADVISORIES.....	13
5.0 APPENDIX.....	14
5.1 TABLE OF STATIONS .....	14



## LIST OF FIGURES AND TABLE

FIGURE 1 CURRENT ITF POSITION FOR JUNE 1 <sup>ST</sup> DEKAD, 2025.....	2
TABLE 1. DEKADAL EVOLUTION OF THE ITF POSITION OVER GHANA 2025.....	3
FIGURE 2. CURRENT MJO POSITION AS OF JUNE 1ST DEKAD, 2025 .....	3
FIGURE 3B: RAINY DAYS JUNE 1ST DEKAD, 2025 .....	5
FIGURE 3A: TOTAL RAINFALL JUNE 1ST DEKAD, 2025.....	5
FIGURE 4. TAMSAT TOTAL RAINFALL JUNE 1ST DEKAD, 2025.....	6
FIGURE 5. RAINFALL ANOMALY JUNE 1ST DEKAD, 2025.....	7
FIGURE 6A. MAXIMUM TEMPERATURE JUNE 1ST DEKAD, 2025.....	8
FIGURE 6B. MAXIMUM TEMPERATURE ANOMALY JUNE 1ST DEKAD, 2025.....	8
FIGURE 7B. MINIMUM TEMPERATURE ANOMALY JUNE 1ST DEKAD, 2025 .....	9
FIGURE 7A. MINIMUM TEMPERATURE JUNE 1ST DEKAD, 2025 .....	9
FIGURE 8. MAX. AND MIN. TEMPERATURE DISTRIBUTION FOR JUNE 1ST DEKAD, 2025 .....	10
FIGURE 9B. AVERAGE RELATIVE HUMIDITY ANOMALY JUNE 1ST DEKAD, 2025 .....	11
FIGURE 9A. AVERAGE RELATIVE HUMIDITY JUNE 1ST DEKAD, 2025 .....	11

## SUMMARY

- **Rainfall:**
  - Most areas received minimal rainfall more than 10.0 mm.
  - The northern sector and transitional zone reported rainfall more than 20mm.
  - Forest zone recorded rainfall of about 50mm – 150mm.
- **Rainfall Anomalies:**
  - Deficit rainfall across most regions.
  - Surplus rainfall in specific areas in forest and coastal zones.
- **Relative Humidity:**
  - Maximum value of 81% and 82% was recorded over Axim and Saltpond respectively.
  - Minimum value of 55 % was recorded over Bole, Navrongo, Wa and Tamale.
- **Temperatures:**
  - **Maximum:**
    - Elevated in Northern and Transition zones.
    - The maximum of the Maximum temperature of 38.5°C was recorded in Tamale
    - Relatively cooler temperatures along the coast and in select forested areas.
  - **Minimum:**
    - Warmer in Northeastern regions, Transitional zone, and Coastal areas.
    - Cooler in Northwestern regions and certain forested areas
    - The minimum of the Minimum temperature was recorded in Bole in the upper west, reaching 21.5°C.

## 1.0 OBSERVED CLIMATE DRIVERS

### 1.1 INTERTROPICAL FRONT

Also known as the Intertropical Convergence Zone (ITCZ) is a critical meteorological feature that significantly influences weather patterns in West Africa, including Ghana. The ITF is a boundary zone where the warm, moist air from the Atlantic Ocean (southwesterly monsoon winds) meets the hot, dry air from the Sahara Desert (northeasterly harmattan winds). This convergence leads to the formation of clouds and precipitation, making it a key driver of the rainy season in West Africa. The northward movement of the ITF during March-July brings the rainy season to Ghana.

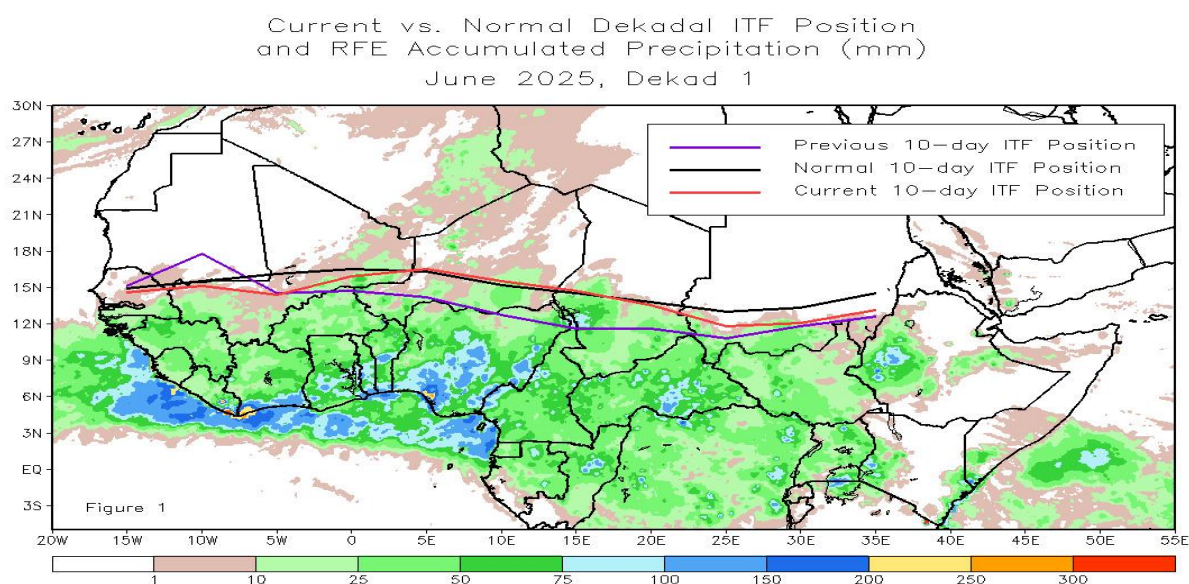


Figure 1 Current ITF position for June 1<sup>st</sup> Dekad, 2025

Figure 1 describes the position of the ITF during the 1<sup>st</sup> dekad of June. The current Inter-Tropical Front (ITF) is positioned at approximately 14.9N, reflecting a northward displacement compared to its previous position at 13.8N. Similarly, Table 1 below also shows the evolving ITF's position of Ghana, located between 5W and 5E.

DEKAD	5W	0	5E
January 1	7.2	7.6	7.8
January 2	7.3	7.8	7.5
January 3	7.9	8.2	8.5
February 1	6.6	8.1	8.3
February 2	9.6	9.0	8.8

February 3	8.2	9.2	8.9
March 1	11.0	10.5	10.1
March 2	10.0	9.8	9.6
March 3	11.6	11.6	11.2
April 1	11.1	11.3	11.1
April 2	12.8	11.7	11.1
April 3	13.5	13.1	12.1
May 1	15.0	13.7	14.2
May 2	13.2	13.9	14.1
May 3	15.1	14.5	14.7
June 1	14.6	15.9	14.4

Table 1. Dekadal evolution of the ITF position over Ghana 2025.

## 1.2 MADDEN-JULIAN OSCILLATION (MJO)

MJO is a tropical disturbance that moves eastward around the globe, influencing weather patterns, including rainfall and temperature, in various regions. The MJO has phases (1-8), with each phase corresponding to its location over the tropics. Its position and strength can have significant implications for weather in Ghana, particularly during the West African monsoon season.

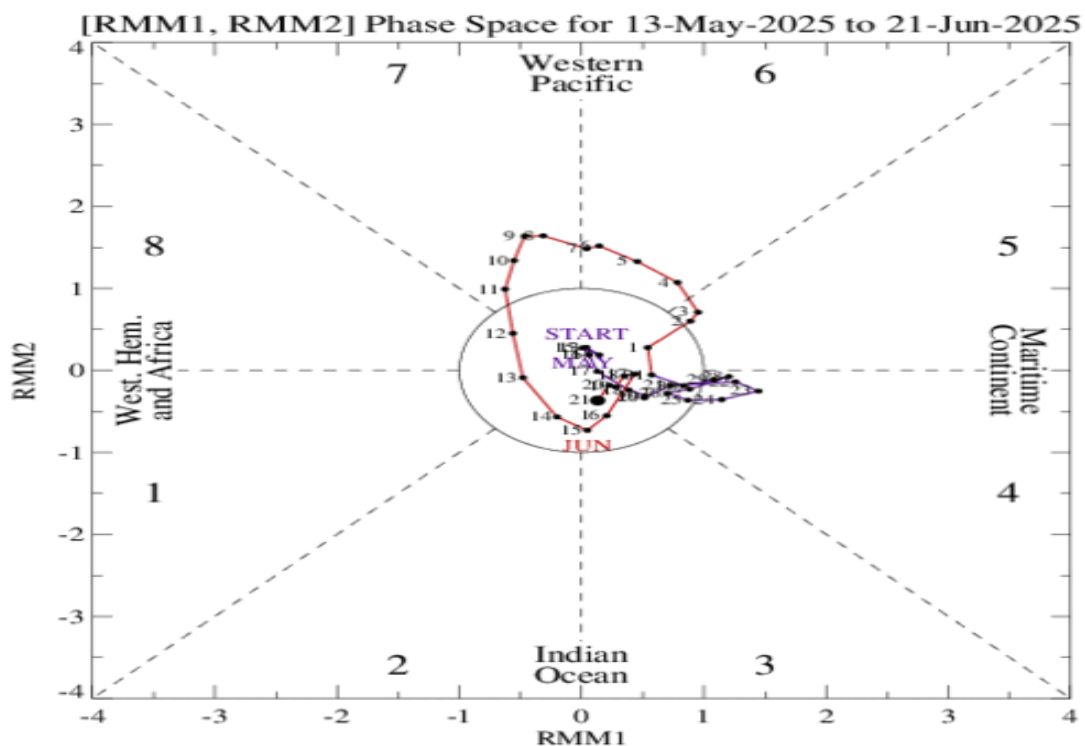


Figure 2. Current MJO position as of June 1st Dekad, 2025

As depicted in Figure 2, the Madden-Julian Oscillation (MJO) was observed between Phases 3 and 4, corresponding to the Indian Ocean and Maritime Continent. And Africa regions. However, its position near the centre of the phase-space diagram indicates a weak amplitude, signifying a less active MJO signal during this period.

Given its current phase and weak intensity, the MJO was unlikely to significantly enhance convective activity over West Africa. This may have contributed to the suppression of rainfall over Ghana in the short term, as the influence of the MJO during weak phases tends to be minimal across the region.



## 2.0 RAINFALL, TEMPERATURE AND RELATIVE DISTRIBUTION

### 2.1 RAINFALL

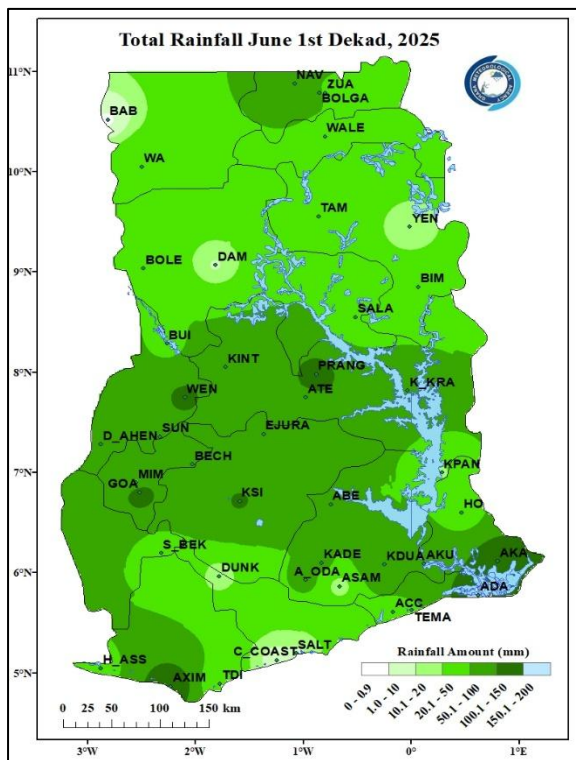


Figure 3a: Total Rainfall June 1st Dekad, 2025

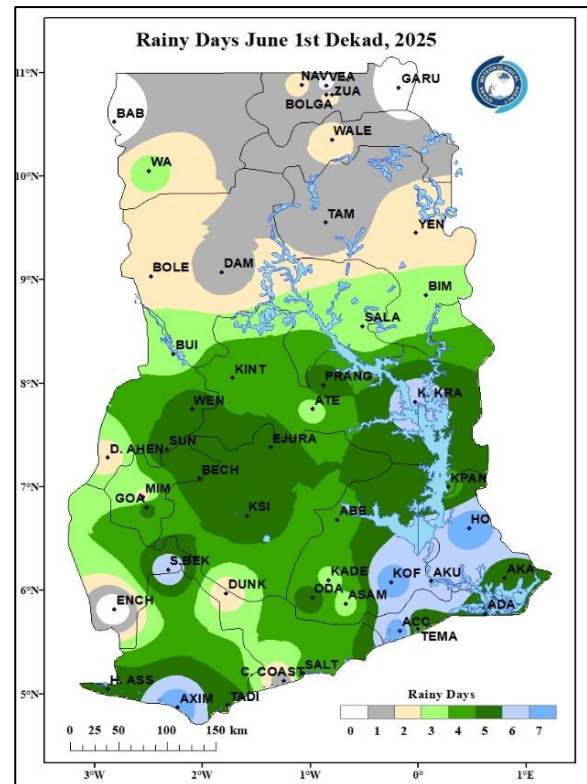


Figure 3b: Rainy Days June 1st Dekad, 2025

Figure 3a illustrates the rainfall distribution during 1<sup>st</sup> dekad of June. The northern sector received significant amount of about 50mm. Stations that recorded the lowest rainfall amount were Damongo and Yendi. Stations within the southern sector, especially the forest zone received adequate amount of rainfall of about **20mm- 200mm** with the highest amount of **167mm** recorded over Ada. Cape Coast and Saltpond recorded the lowest rainfall of less than 10mm.

Figure 3b illustrates the frequency of rainy days during the dekad. The southern sector experienced rainfall mostly in 3 to 7 days. Stations like Ho, Koforidua, Accra, Ada and Axim record the highest maximum number of 7 rainy days. The northern sector received rainfall for 1 to 2 days.



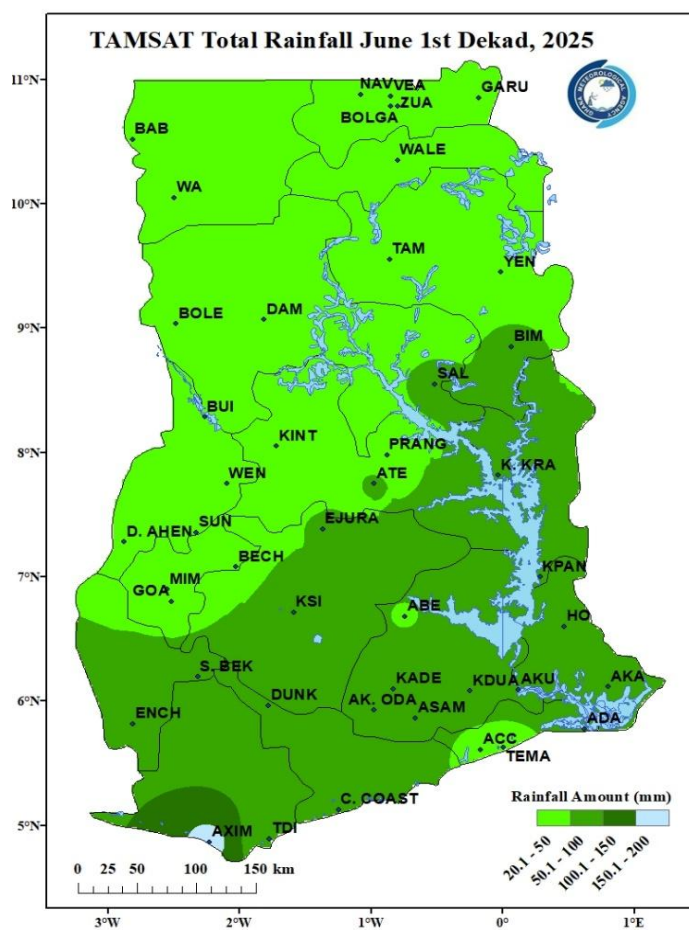


Figure 4. TAMSAT Total Rainfall June 1st Dekad, 2025

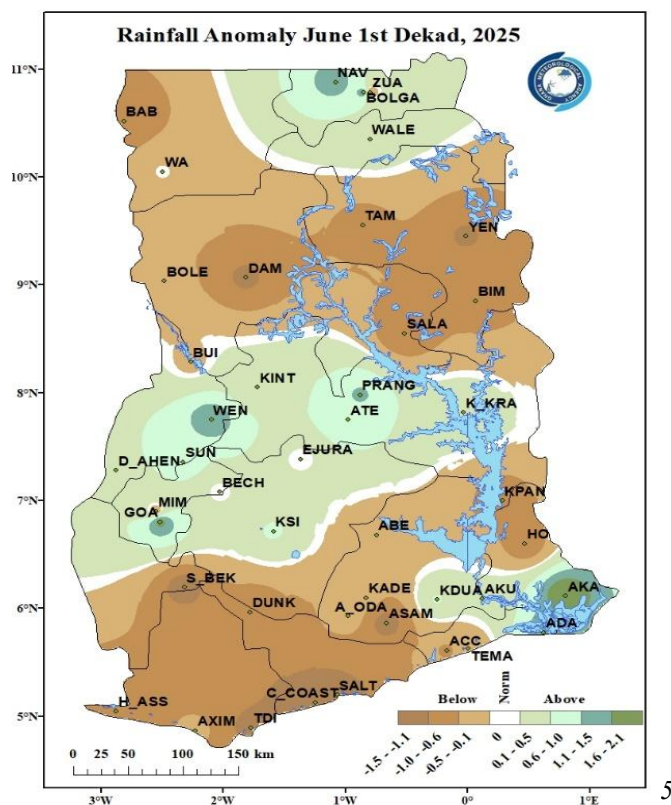


Figure 5 also highlights rainfall anomaly for the 1<sup>st</sup> dekad of June. Most areas of the country experienced below-normal rainfall, except for areas within the extreme northeastern (Navrongo, Bolgatanga and Walewale, forest zone (Kintampo, Prang, Dormaa Ahenkro, Wenchi, Sunyani, Atebubu Kete Krachi, Goaso, Kumasi) and the east coast (Koforidua, Akuse Ada and Akatsi). However, Wa in the north, Ejura and Bechem in the south showed normal rainfall anomaly.

Figure 5. Rainfall Anomaly June 1st Dekad, 2025

## 2.2 TEMPERATURE

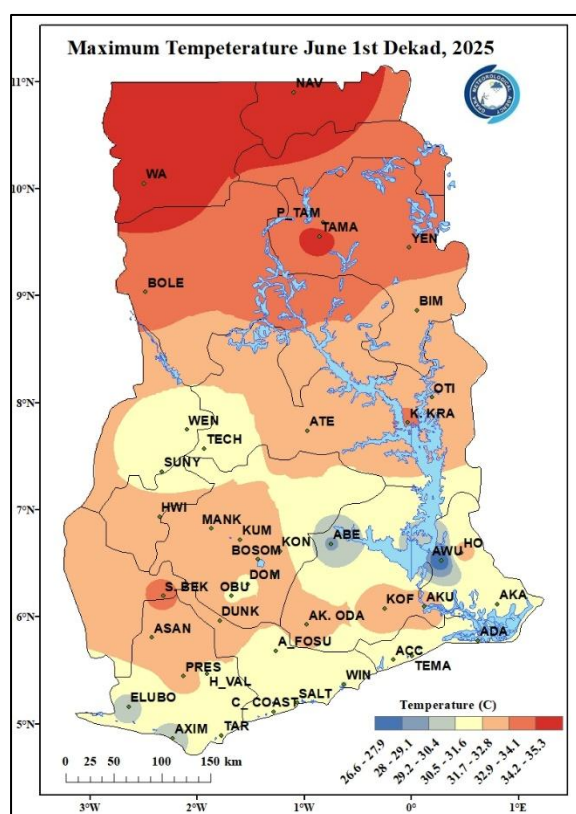


Figure 6a. Maximum Temperature June 1st Dekad, 2025

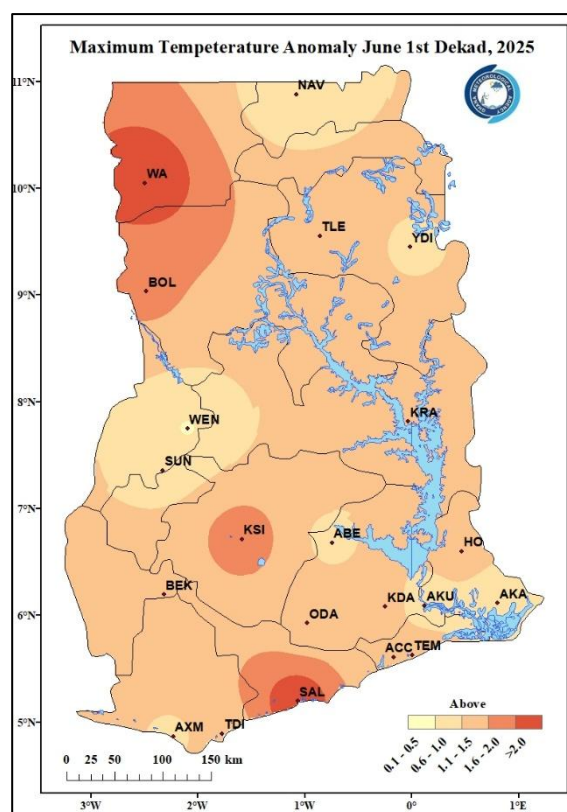


Figure 6b. Maximum Temperature Anomaly June 1st Dekad, 2025

Figure 6a displays the distribution of average daytime temperatures across the country. The northern belt recorded higher temperatures, ranging from 33°C to 35°C. The highest temperature of 35°C was recorded in Navrongo, while the lowest temperature of 27°C was observed in Awudome. In the transition zone, temperatures ranged between 30°C and 32°C. The southern sector, including Abetifi, Ada, Saltpond, Elubo and Axim experienced relatively cooler temperatures ranging from 26.6°C to 30.0°C. Temperature were relative cooler during this dekad. Maximum Temperature Anomaly is represented in figure 6b above. It is evident that, almost the entire country experienced above normal temperatures.

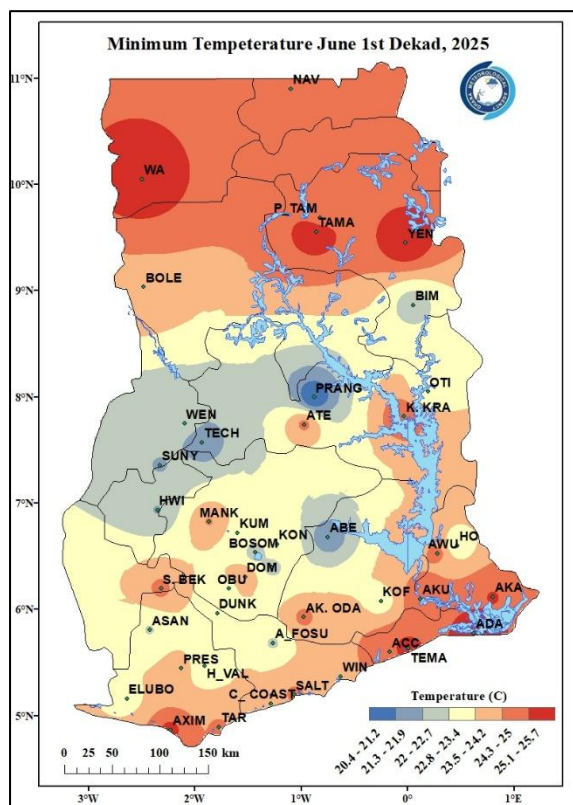


Figure 7a. Minimum Temperature June 1st Dekad, 2025

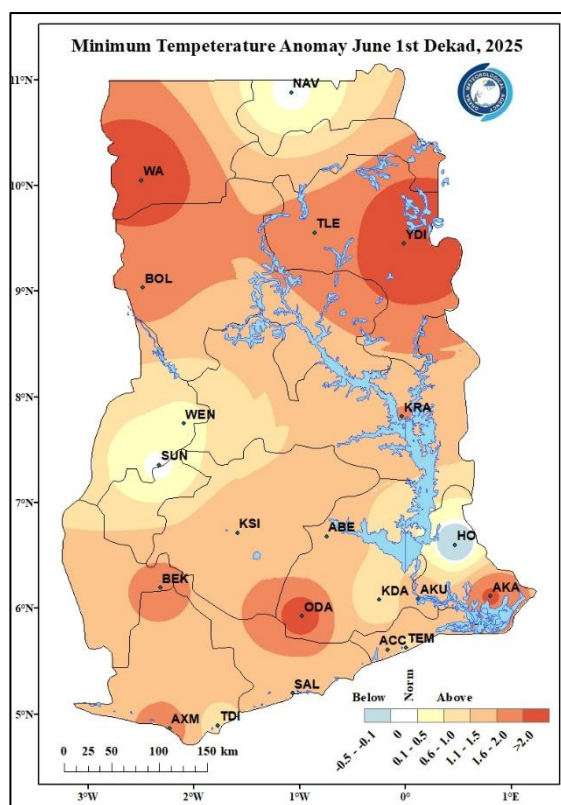


Figure 7b. Minimum Temperature Anomaly June 1st Dekad, 2025

In *Figure 7a*, the average nighttime temperatures varied across different regions. The northern Sector as well as areas along the coastal such as Axim, Accra, Ada and Tema experienced relatively warmer temperatures with average values ranging from 23.0°C to 26.0°C. Wa and Yendi in the north recorded the highest minimum average temperatures of 25.7°C and 25.6°C respectively whereas Accra, Ada and Axim recorded the highest temperatures of 24.9°C, 25.6°C and 25.2°C respectively in the south. Some parts of the transition zone such as Sunyani, Techiman, Wenchi, Prang, Hwidiem and some areas in the north, like Bimbila recorded relatively lower average temperature values between 20.0°C to 23.0°C. The lowest average night-time temperature of 20.4°C was recorded in Prang.

In *figure 7b*, depicts the Minimum Temperature Anomaly. Ho experienced below normal temperatures while above normal temperatures dominated the entire country indicating increased nighttime temperatures during the period.

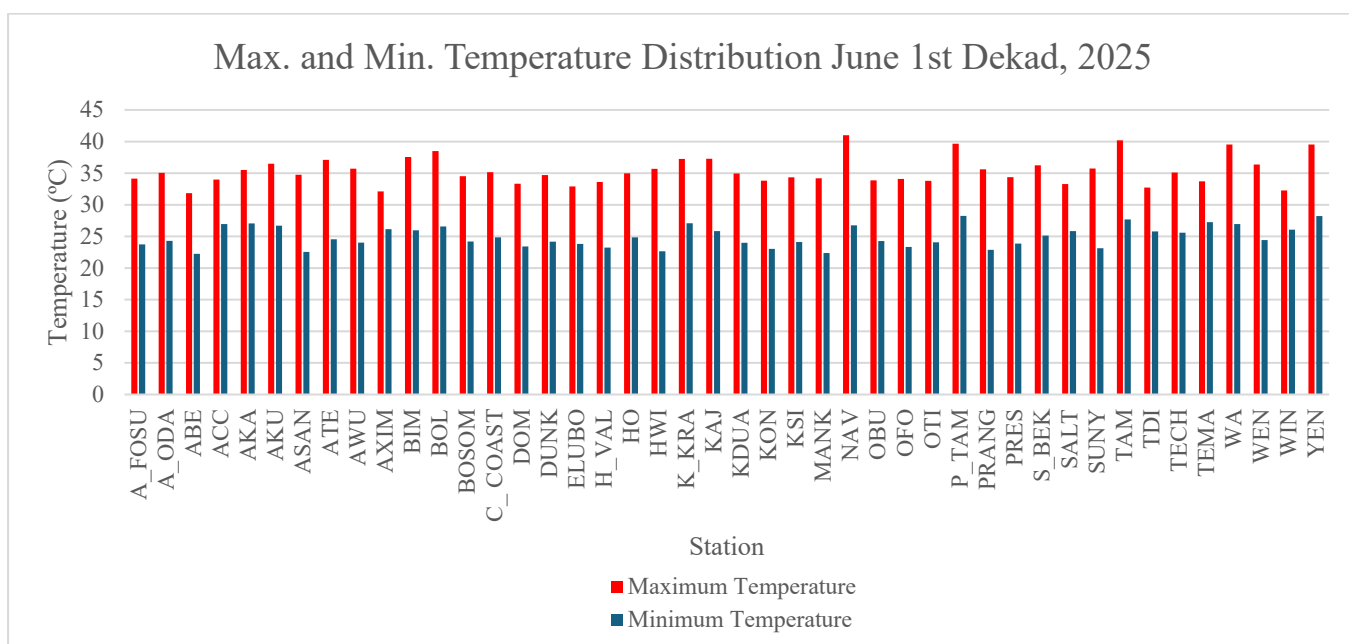


Figure 8. Max. and Min. Temperature Distribution for June 1st Dekad, 2025



## 2.3 RELATIVE HUMIDITY

The Observed Relative Humidity (RH) over the 1<sup>st</sup> dekad period is displayed in *figure 9a* below. The country generally experienced a very humid atmosphere of 50%-90%. The Transition and Northern areas experienced RH values ranging from 20 to 50 %. The southern sector recorded RH of 60% - 90% with the highest RH over the coastal and inland areas.

Average RH Anomaly is also presented in figure 9b. Generally, a normal to below normal RH is observed over the entire country.

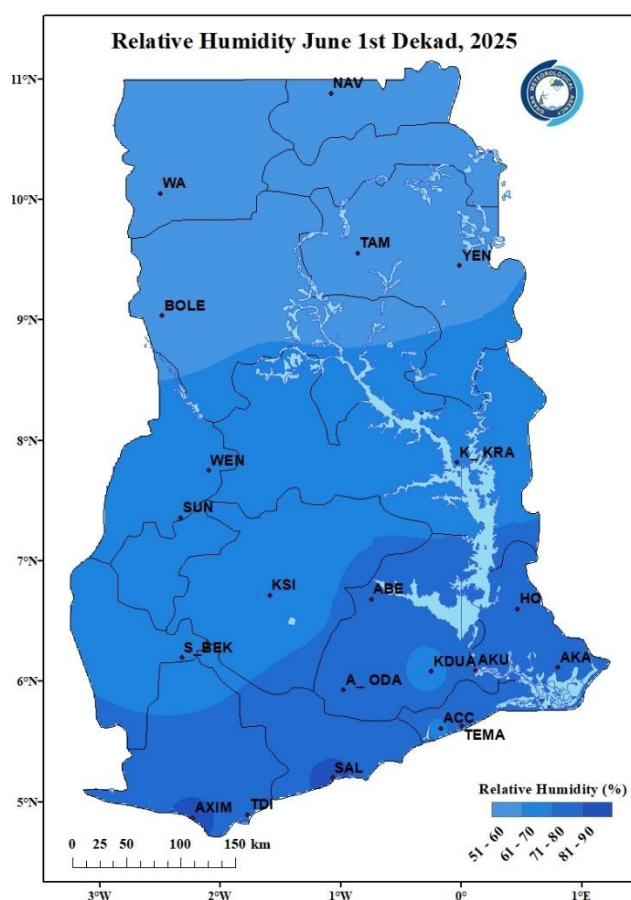


Figure 9a. Average Relative Humidity June 1st Dekad,

2025

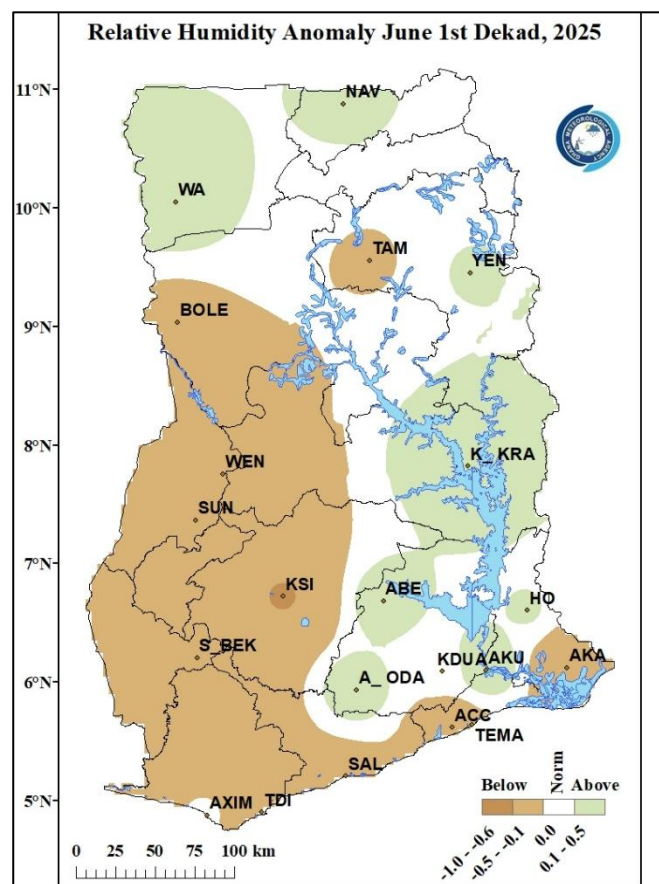
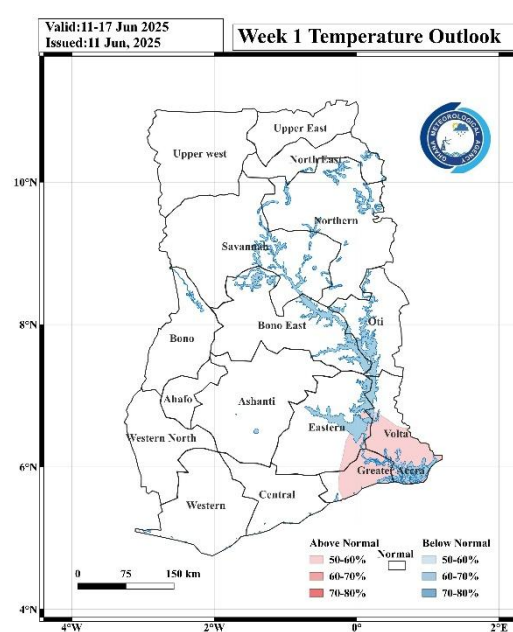
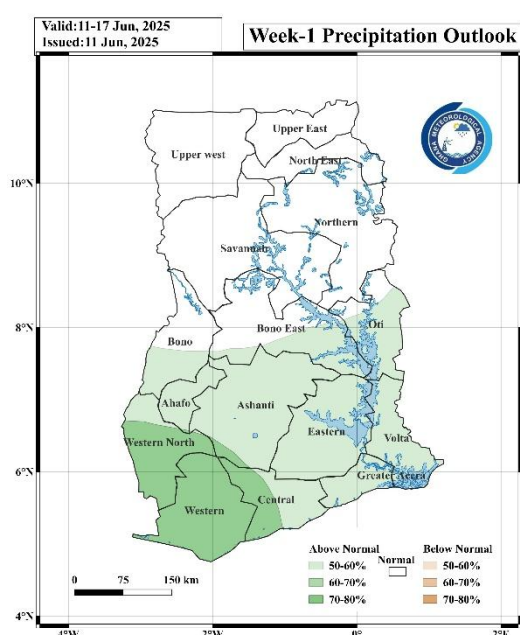


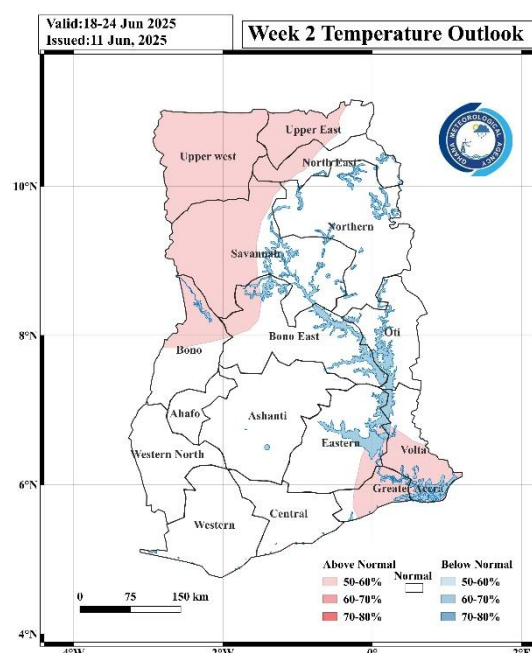
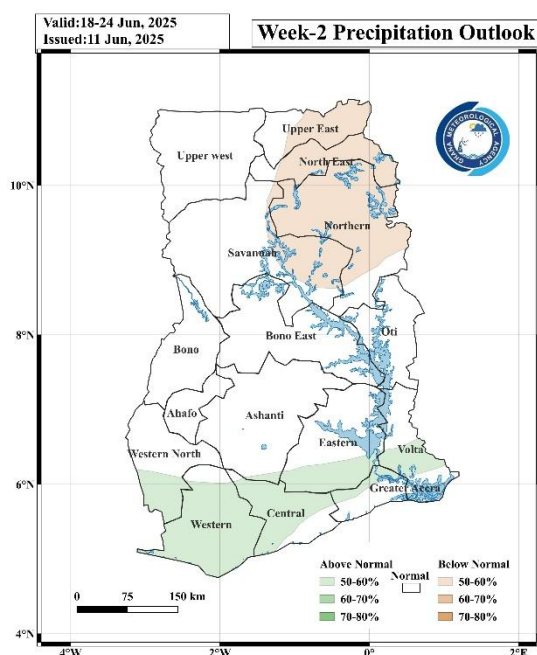
Figure 9b. Average Relative Humidity Anomaly June 1st

### 3.0 RAINFALL AND TEMPERATURE OUTLOOK 11- 24<sup>TH</sup> JUNE 2025

Above normal rainfall is expected over the Southern half of the country. The rest of the country is expected to experience normal rainfall; The entire country is expected to experience normal temperatures except for places around the East Coast and its inland areas. In Week 2, The North-eastern part of the Northern sector is likely to experience Below normal rainfall whereas the West Coast and inland areas, together with some parts of the Forest zone is expected to record above normal rainfall. The North-western flank of the country is expected to record above normal temperatures.







## 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

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

### 3. General Public

- 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
- Stay hydrated, avoid prolonged sun exposure, and wear light clothing.
- Stay updated on weather forecasts from the Ghana Meteorological Agency.

## 5.0 APPENDIX

### 5.1 TABLE OF STATIONS

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	Ho	HO	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	Veia 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	BOMPA	Prang	PRANG	Zuarungu	ZUA
Breman Asikuma	B. ASIK				

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

**Contact:**

**The Director General**

**Tel. +233 (0)30 701 0019 or [clients@meteo.gov.gh](mailto:clients@meteo.gov.gh)/[info@meteo.gov.gh](mailto:info@meteo.gov.gh)**