2026

CLIMATE BULLETIN

DEKAD 3, MAY (21-31)

GMET/CLIMATE/030526 FORM337

5/21/2026

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SUMMARY

- **Rainfall:**
  - Most areas received rainfall above 50mm
  - Dunkwa received the highest rainfall of 234.9 mm.
  - Highest rainy days was 10 days
- **Rainfall Anomalies:**
  - Surplus rainfall in most parts of the country especially the south-western portions.
  - The eastern portions of the country from the north all through to the south experienced deficit rainfall.
- **Temperatures:**
  - **Maximum:**
    - Above normal temperatures at the coastal sector and parts of the transition.
    - The highest temperature of 34.7°C was recorded in Navrongo
    - Relatively cooler temperatures around Abetifi.
  - **Minimum:**
    - Warmer temperatures in the northern portions of the country
    - Above normal temperatures in most parts of the country
    - The lowest temperature was recorded in Abetifi, reaching 20.5°C.

1.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.

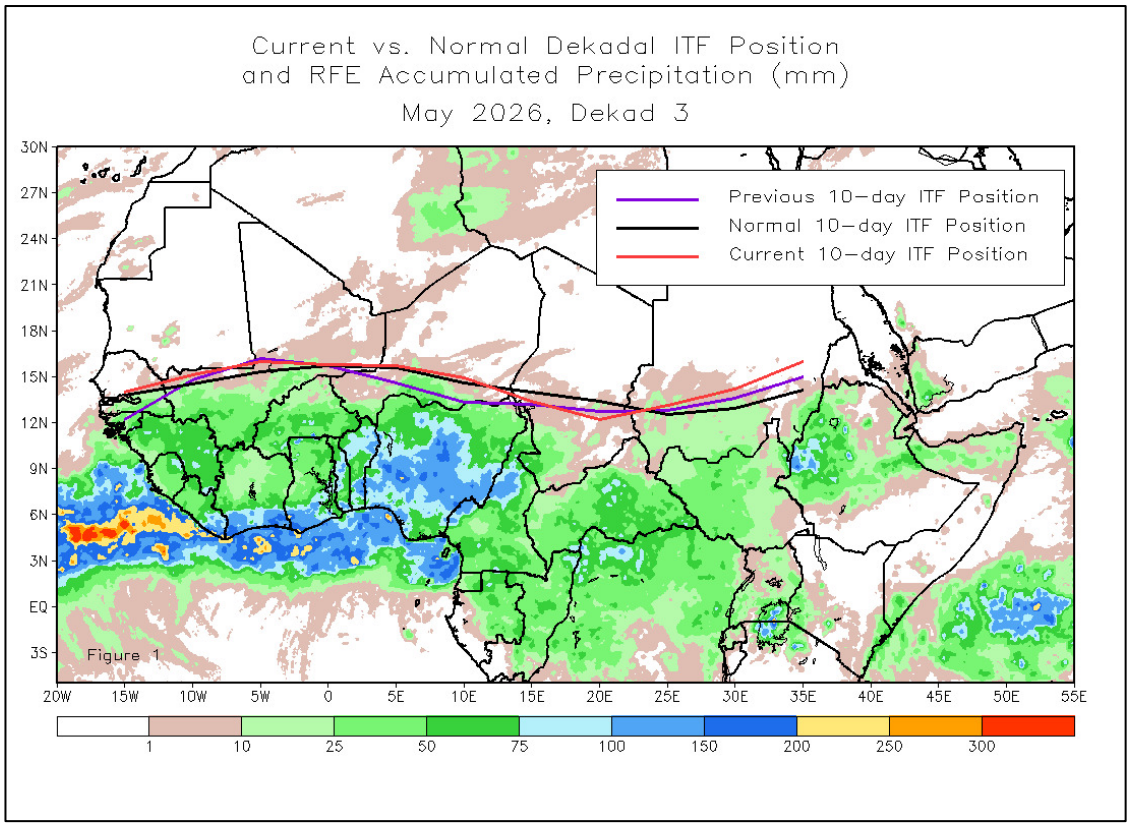


Figure 1. Current ITF position for May 3rd Dekad, 2026

Figure 1 displays the position of the ITF during the 3rd dekad of April and its previous position during the 3rd dekad of May. Between May 21 and 31, the current Inter-Tropical Front (ITF) shifted northward compared to its previous location. Specifically, the current ITF was located at approximately 15.8N in the northern sector of the country which is north of its previous position at 15.7N. 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	12.7	12.2	11.5
April 2	12.7	12.2	12.5
April 3	15.5	14.6	13.5
May 1	16.7	15.5	14.8
May 2	16.2	15.7	14.6
May 3	16.0	15.8	15.7

Table 1. Dekadal evolution of the ITF position over Ghana 2026.

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.

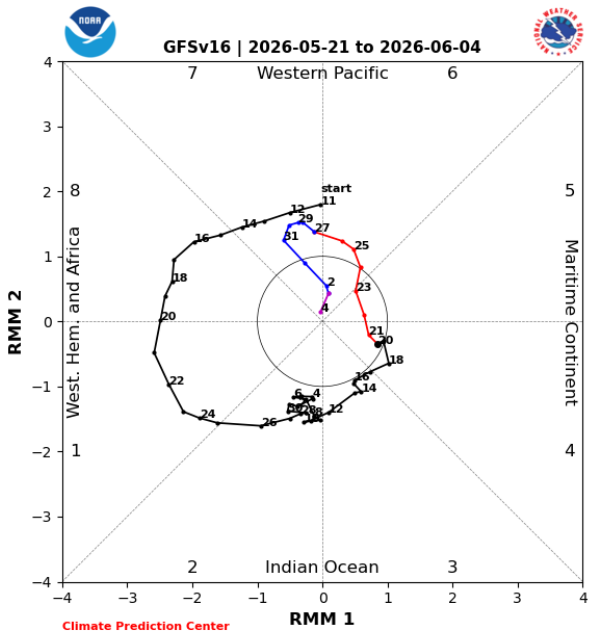


Figure 2. Current MJO position as of May 3rd Dekad, 2026

As depicted in Figure 2, the Madden-Julian Oscillation (MJO) was observed between Phases 4 and 5, corresponding to the Maritime Continent and Western Pacific regions. However, its position from the phase-space diagram indicates a strong amplitude, signifying an active MJO signal during this period.

Given its current phase and weak intensity, the MJO likely significantly enhanced convective activity over West Africa. This may have contributed to the surplus of rainfall over Ghana in the short term.

2.0 RAINFALL AND TEMPERATURE DISTRIBUTION

2.1 RAINFALL

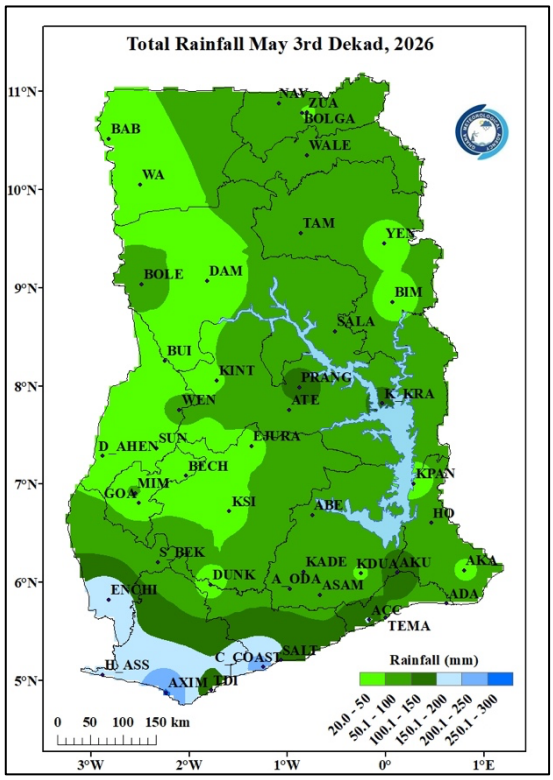


Figure 3a. Total Rainfall May 3rd Dekad, 2026

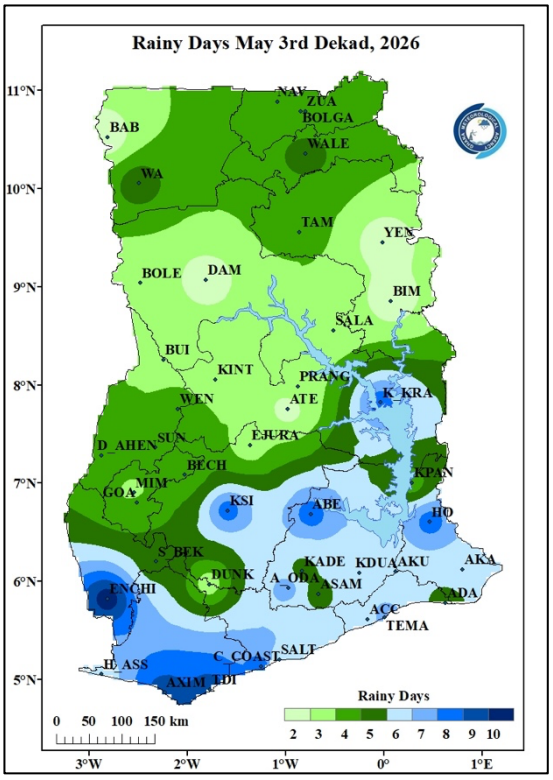


Figure 3b. Rainy Days May 3rd Dekad, 2026

Figure 3a presents the spatial distribution of rainfall across Ghana during the third ten-day period (dekad) of April. During this period, Sefwi Bekwai recorded the highest total rainfall, amounting to 234.9 mm. Generally, most of the transition and southern regions received moderate to relatively high rainfall, while some northern areas show lower totals during this dekad.

Figure 3b illustrates the frequency of rainy days within the same period. Most areas across Ghana, spanning from the Northern to the Southern zones, recorded between three (3) and five (5) rainy days. The highest recorded during this period was ten (10).

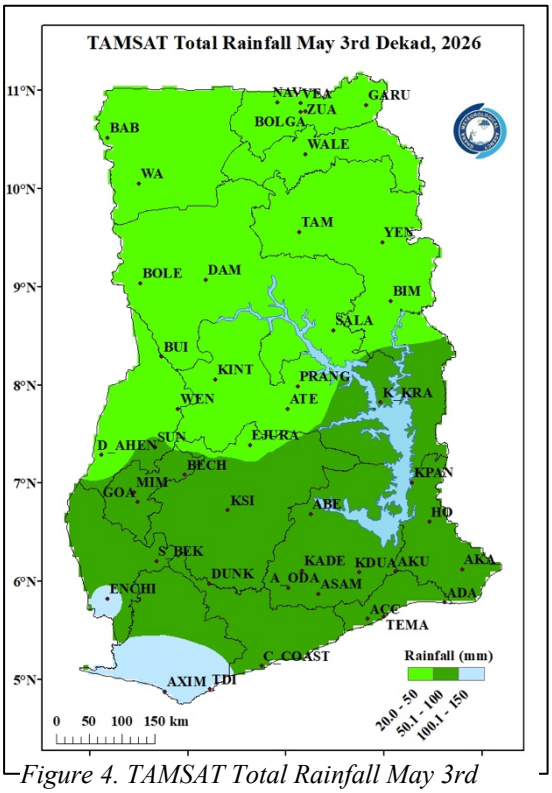


Figure 4. TAMSAT Total Rainfall May 3rd Dekad, 2026

Figure 4 shows TAMSAT total rainfall in Ghana for the 3rd dekad (2026). Rainfall totals vary across the country, ranging from low amounts (20 mm) to higher totals (up to about 150 mm). In general, most regions recorded moderate to high rainfall, with the wettest areas mainly in the southern belt, while some areas in the far north receive lower totals during this period. This satellite data underestimated parts of the eastern fringes and some places in the north in relation to the ground observed data.

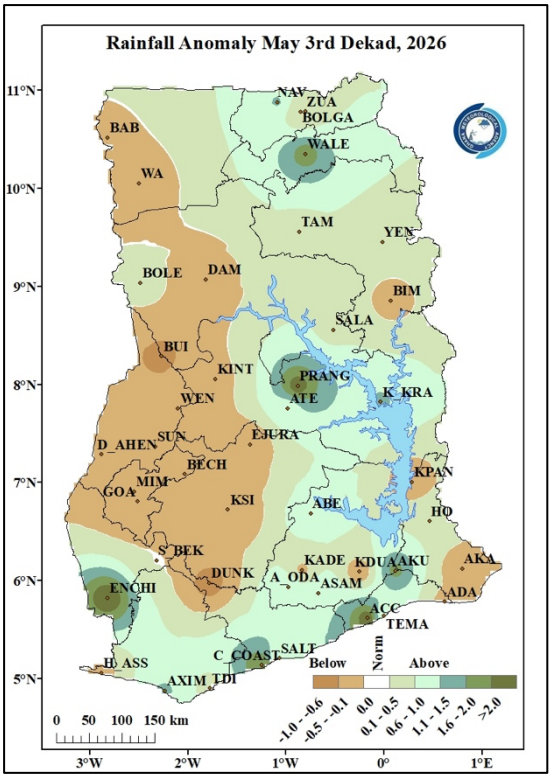


Figure 5: Rainfall Anomaly for May 3rd Dekad, 2026

Figure 5 highlights areas across the country that experienced deviations from normal rainfall during the reporting period. Notably, most locations in the western fringes recorded rainfall deficit. In contrast, most parts of the country experienced surplus rainfall.

2.2 TEMPERATURE

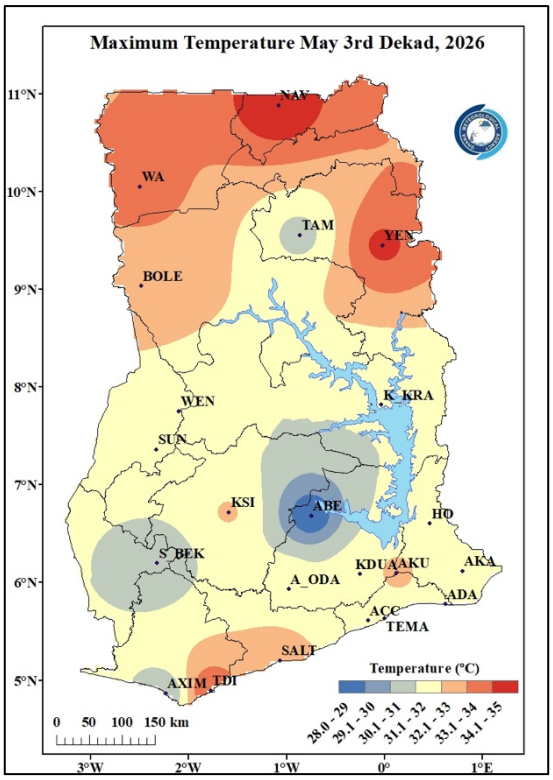


Figure 6a. Maximum Temperature May 3rd Dekad, 2026

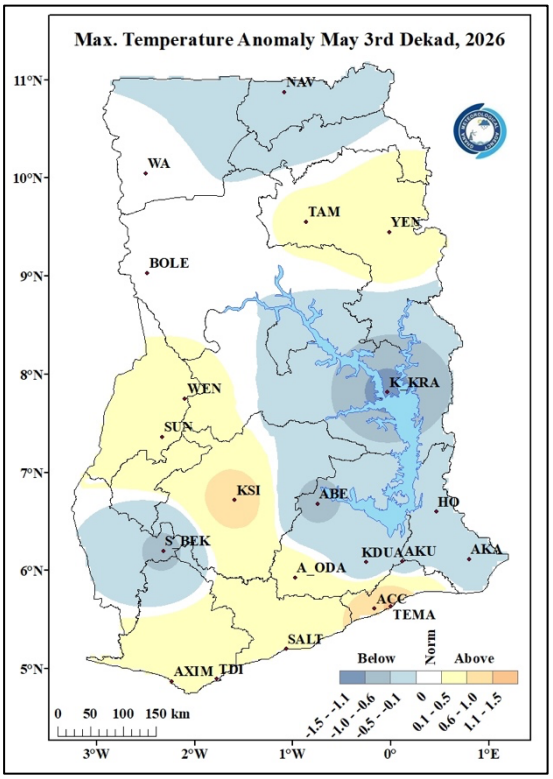


Figure 6b. Maximum Temperature Anomaly May 3rd Dekad, 2026

Figure 6a displays the distribution of average Maximum temperatures across the country. During the reporting period, the northern belt of Ghana recorded the highest temperatures, ranging from 33.0°C to 35.0°C. The highest temperature, 34.7°C, was observed in Navrongo, while the lowest, 28°C, was recorded in Awudome. In the southern sector, temperatures generally ranged from 28 to 33°C.A few places like Abetifi, Sefwi Bekwai, Axim and Tamale recorded relatively low temperatures.

Figure 6b illustrates the Maximum Temperature Anomalies across the country. Areas along the coast and some parts of the transition and the northern sector exhibited above-normal to near-normal temperatures. In contrast, locations around the eastern fringes including Ho, Akatsi, and other areas around Abetifi, Koforidua experienced below-normal maximum temperatures, indicating localized cooler-than-average conditions for this time of year

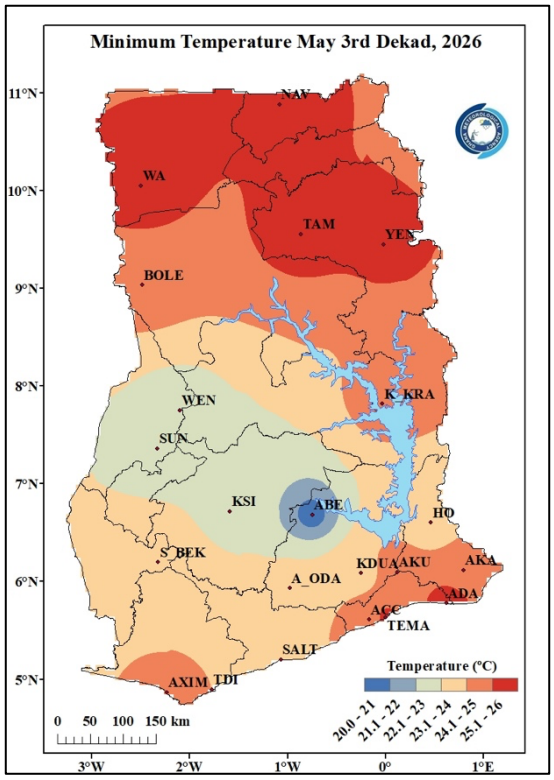


Figure 7a. Minimum Temperature May 3rd Dekad, 2026

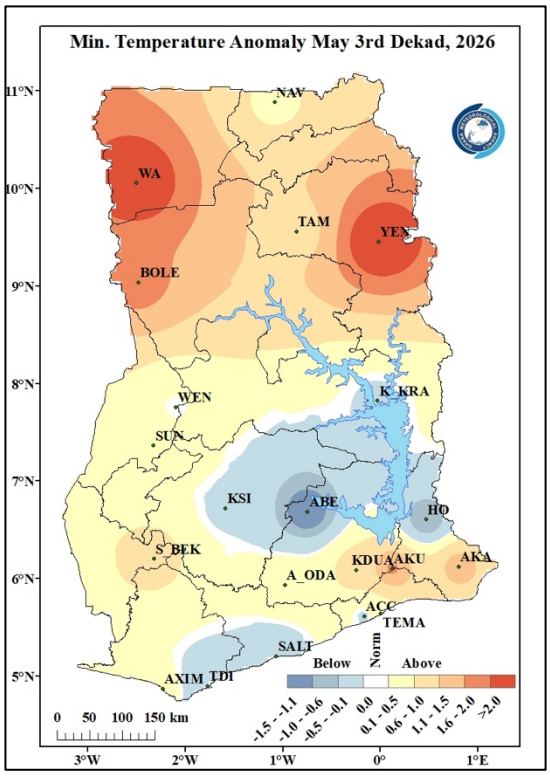


Figure 7b. Minimum Temperature Anomaly May 3rd Dekad, 2026

In *Figure 7a*, the average minimum temperatures varied across different regions. The Northern zones and some areas along the coast of the country (Navrongo, Wa. Tamale, Yendi , Axim and Ada experienced relatively warmer temperatures, with average values ranging from 25°C to 26.0°C. In contrast, areas such as Sunyani, Abetifi, Kumasi to mention a few experienced relatively cooler average nighttime temperatures ranging from 20.0°C to 22.0°C. The lowest average nighttime temperature was recorded in Abetifi, reaching 20.36°C.

In *figure 7b*, we see the Minimum Temperature Anomaly. It is evident that, most parts of the country especially the north experienced above normal temperatures indicating increasing nighttime temperatures. However, areas such as Kumasi, Abetifi, Saltpond , Takoradi and Ho experienced below normal minimum temperatures.

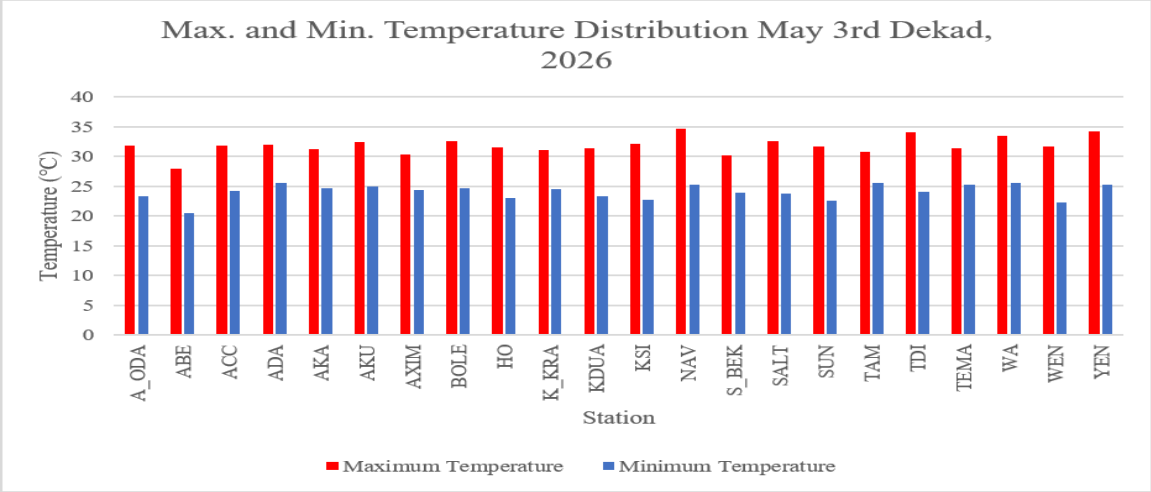
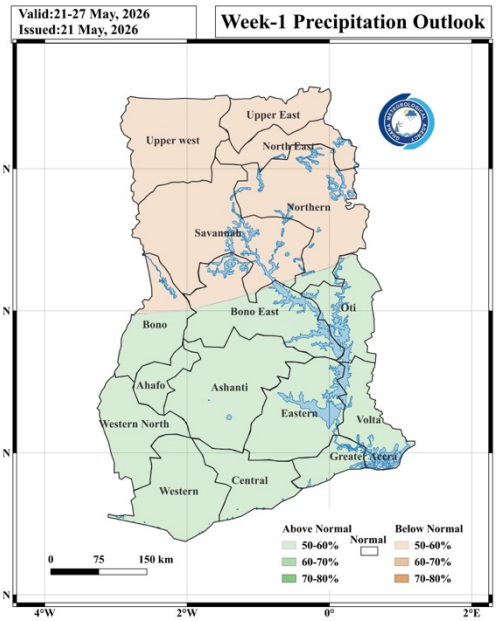
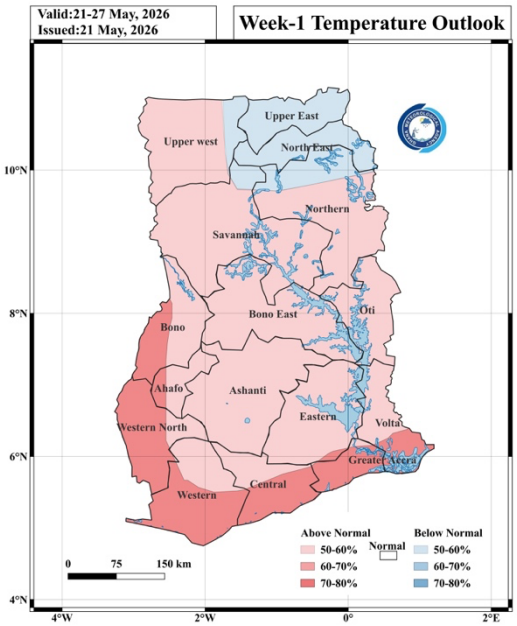


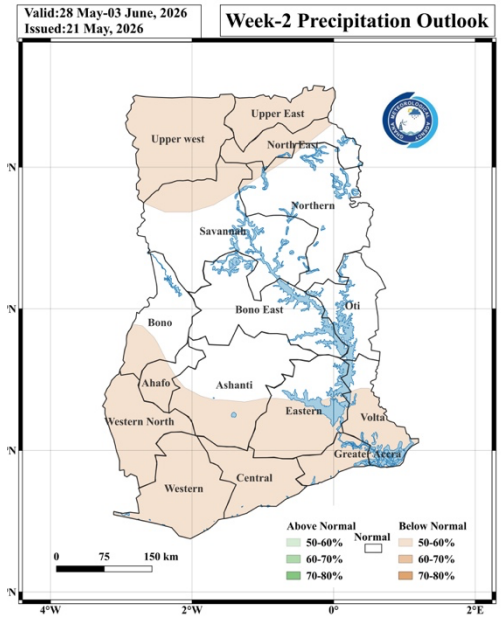
Figure 8. Max. and Min. Temperature Distribution for May 3rd Dekad, 2026

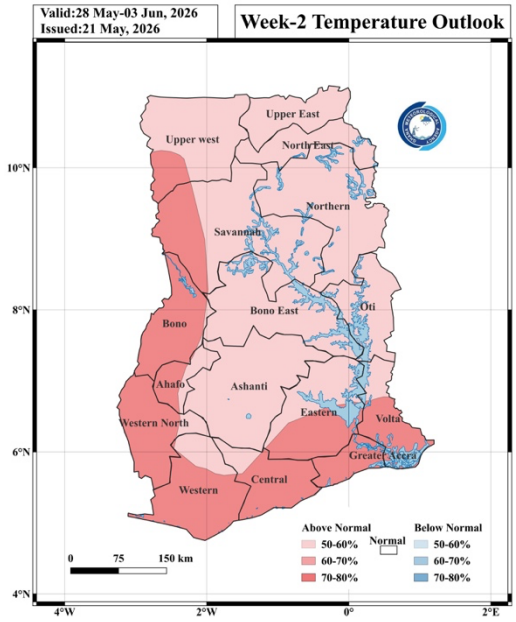
3.0 RAINFALL AND TEMPERATURE OUTLOOK 1ST- 14TH APRIL 2025

Week 1 is expected to bring above-normal rainfall to the southern regions, accompanied by above-normal temperatures across the country. In Week 2, rainfall is projected to be below normal in the North and southern areas, while temperatures will be above normal in the south-western portions.









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 less rainfall (Northern sector).

3. **General Public**
    - Above-Normal Temperatures (Nationwide). The 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	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	BOMPA	Prang	PRANG	Zuarungu	ZUA
Breman Asikuma	B. ASIK				

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