MAY 2025

CLIMATE BULLETIN

DEKAD 3, MAY (21-31)
GMET/CLIMATE/210525.....FORM337
5/21/2025

TABLE OF CONTENT

LIST OF FIGURES

SUMMARY

- **Rainfall:**
  - Most areas received rainfall above 50mm
  - Dunkwa received the highest rainfall of 174.3 mm.
  - Akim Oda, Koforidua and Sefwi Bekwai recorded the highest rainy days of 6 days
- **Rainfall Anomalies:**
  - Surplus rainfall in parts of the forest, transition and few portions of the north.
  - The northern and coastal areas experienced deficit rainfall.
- **Relative Humidity:**
  - Maximum value of 80.9% was recorded over Abetifi
  - Minimum value of 53% was recorded over Navrongo.
- **Temperatures:**
  - **Maximum:**
    - Above normal temperatures are experienced at most places across the country.
    - The maximum of the Maximum temperature of 35.1°C was recorded in Navrongo.
    - The minimum of the Maximum temperature of 29°C was recorded in Abetifi.
    - Relatively cooler temperatures were recorded at the southern portions of the country.
  - **Minimum:**
    - Warmer temperatures in the northern, coastal and southeastern sectors.
    - Relatively above normal temperatures at most areas of the country.
    - The maximum Minimum temperature of 25.8°C was recorded in Tema.
    - The minimum of the Minimum temperature was recorded in Abetifi; reaching 21.2°C.

1. OBSERVED CLIMATE DRIVERS

1.1 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.

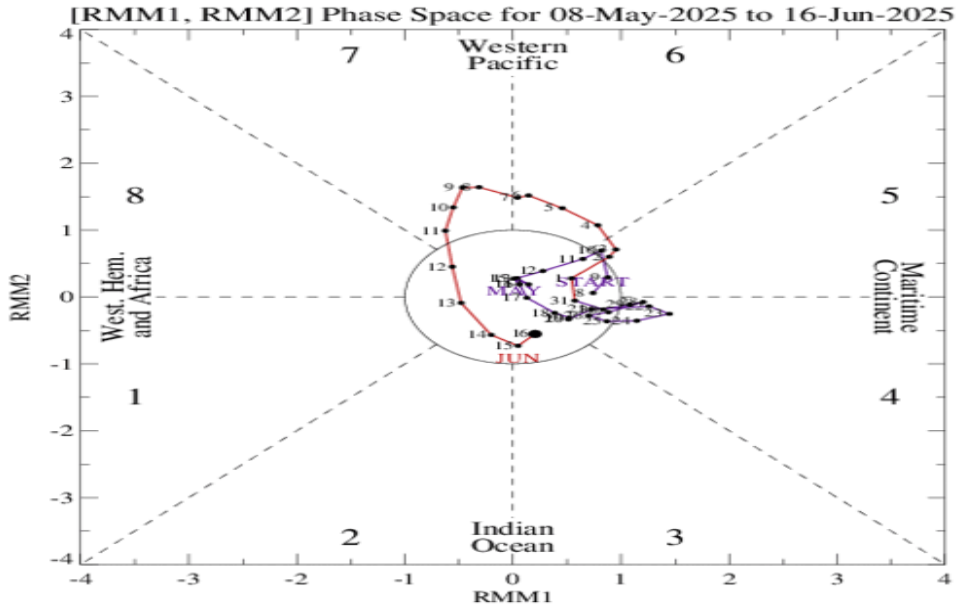


Figure 1. Current MJO position as of May 3rd Dekad, 2025

As depicted in Figure 1, the Madden-Julian Oscillation (MJO) was observed between Phases 4 and 5, corresponding to the Maritime Continent. However, its position inside the centre of the phase-space diagram indicates a weak amplitude, signifying an inactive MJO signal during this period.

2.0 RAINFALL, TEMPERATURE AND RELATIVE DISTRIBUTION

2.1 RAINFALL

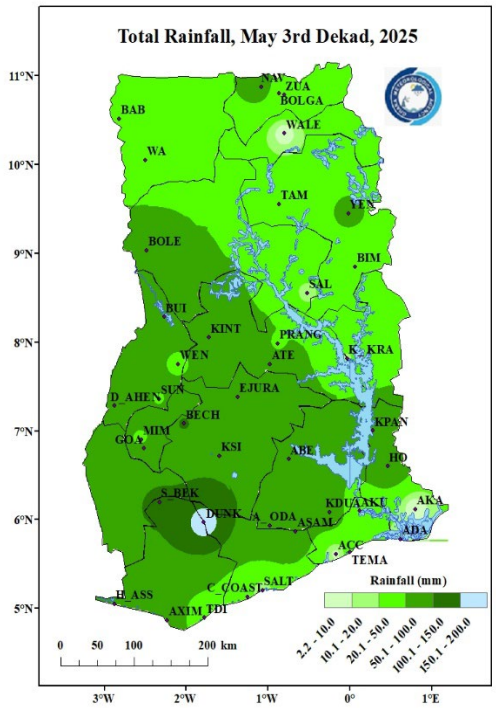


Figure 2a. Total Rainfall May 3rd Dekad, 2025

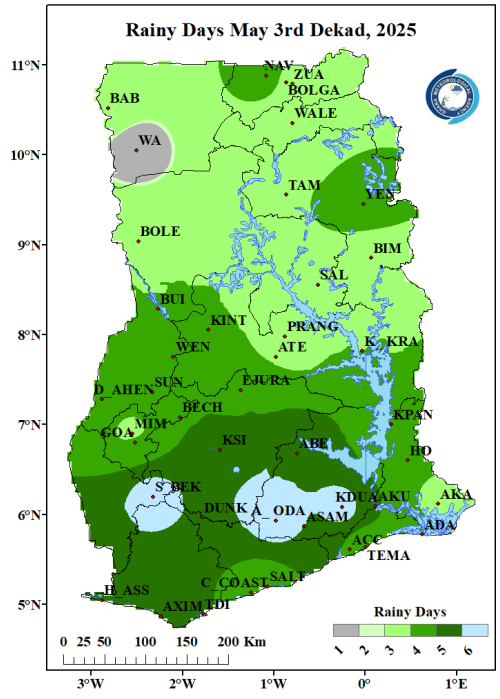


Figure 2b. Rainy Days May 3rd Dekad, 2025

Figure 2a describes rainfall distribution across Ghana during the third ten-day period (dekad) of May. During this period, Dunkwa recorded the highest total rainfall, amounting to 174.3 mm. On the other hand, Akatsi and Walewale recorded the least rainfall amounts of 2.2 and 3.2 mm respectively.

Figure 2b illustrates the frequency of rainy days within the same period. Most stations at the northern portions of the country, recorded between one (1) and three (3) rainy days. The southern portions recorded between 4 and 6 rainy days with Sefwi Bekwai, Akim Oda and Koforidua recording the highest frequency of 6 rainy days.

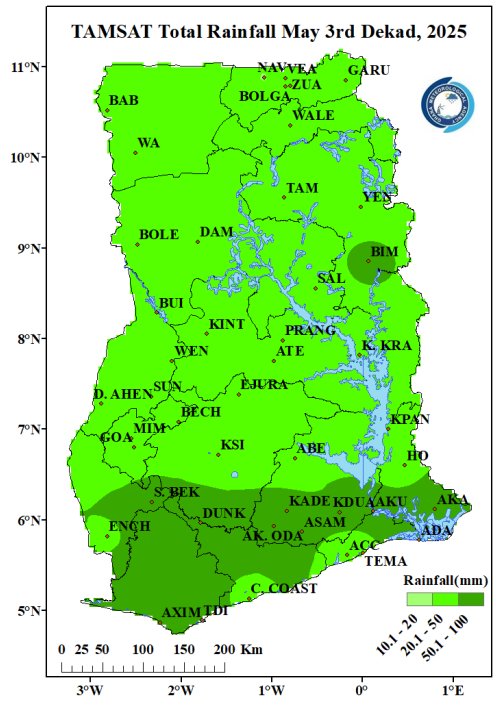


Figure 3 represents total rainfall for the duration, as calculated from the TAMSAT rainfall estimates**.** The satellite-based data is helpful in terms of nationwide rainfall distribution. In this dekad, only a few portions of the forest zone and the northern sector conformed with ground-based observations.

Figure 3. TAMSAT Total Rainfall May 3rd Dekad, 2025

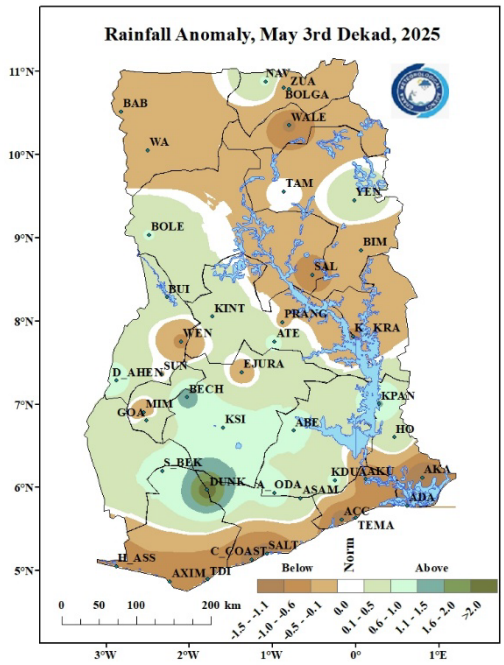


Figure 4 describes areas across the country that experienced deviations from normal rainfall during the period. Notably, most stations at the northern and the coastal areas experienced deficit rainfall with the exception of Bole, Tamale, Yendi and Navrongo. On the other hand, the forest areas experienced surplus rainfall, except for Wenchi, Mim and Ejura which experienced deficit rainfall.

Figure 4: Rainfall Anomaly for May 3rd Dekad, 2025

2.2 TEMPERATURE

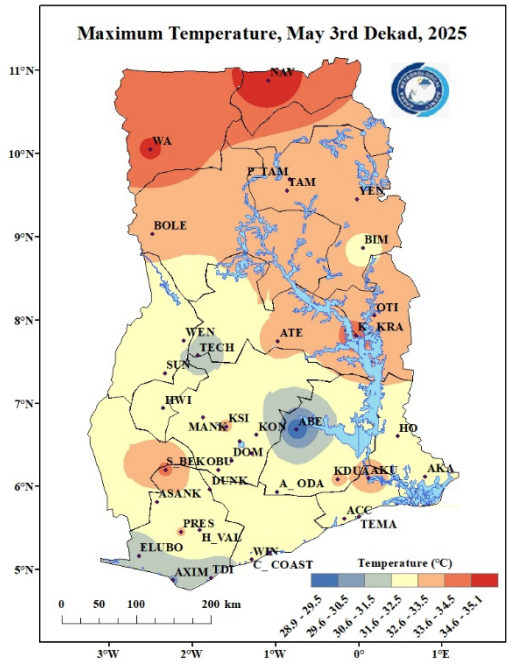


Figure 5a. Max. Temperature May 3rd Dekad, 2025

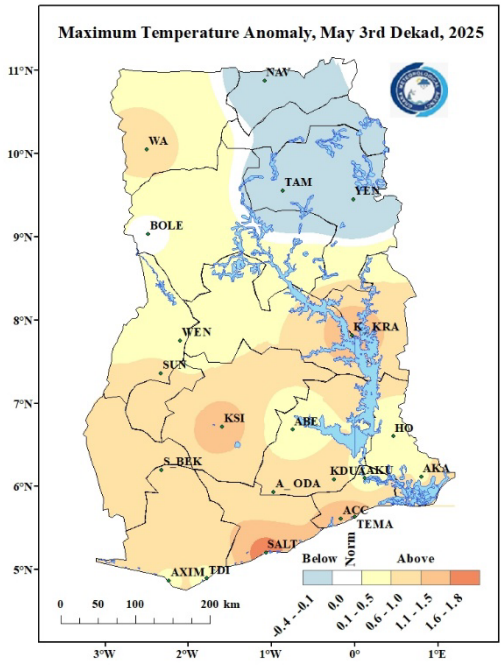
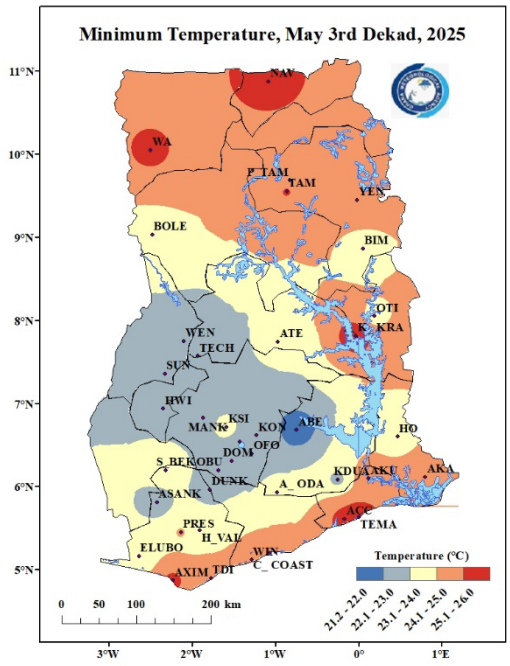


Figure 5b. Max. Temperature Anomaly May 3rd Dekad, 2025

Figure 5a displays the distribution of average Maximum temperatures nationwide. During the reporting period, the northern areas and parts of the transition zone recorded the highest temperatures, ranging from 32.6°C to 35.1°C except for Bimbila. The highest temperature of 35.1°C, was observed in Navrongo, while the lowest, 29.0°C, and was recorded in Abetifi. Relatively cooler temperatures were recorded in the southern portions of the country with temperatures ranging from 28.9°C to 32.5°C. However, Sefwi Bekwai, Kumasi, Prestea, Koforidua and Akuse all in the south experienced temperatures between 32.6 and 34.5°C.

Figure 5b illustrates the Maximum Temperature Anomalies. In this dekad, most of the stations across the country experienced above-normal temperatures in the exception of Bole, Navrongo, Tamale and Yendi which exhibited near-normal to below-normal temperatures.



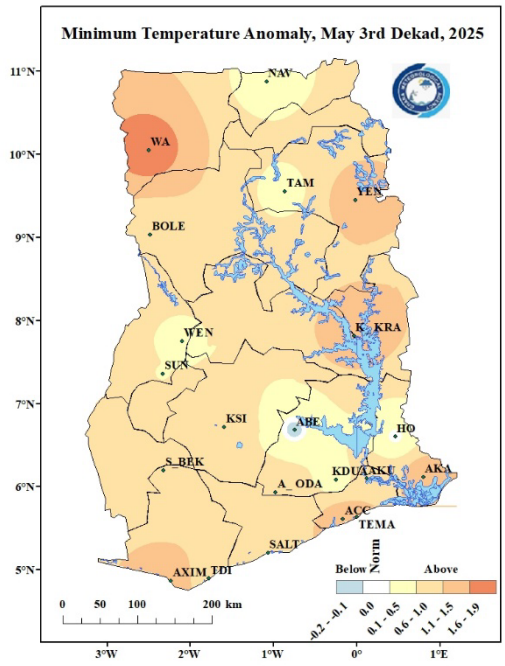


Figure 6a. Min. Temperature May 3rd Dekad, 2025 *Figure 6b. Min. Temperature Anomaly May 3rd Dekad, 2025*

In *Figure 6a*, the average minimum temperatures varied across different sectors. The northern sector, parts of the transition and areas along the coast of the country experienced relatively warmer temperatures, with average values ranging from 24.1°C to 26.0°C. Some of these stations include Navrongo, Wa, Pong Tamale, Tamale, Yendi, Accra, Tema and Ada. Conversely, areas such as Sunyani, Abetifi, Asankragua, Koforidua, Akim Oda and Techiman to mention a few experienced relatively cooler average night-time temperatures ranging from 21.2°C to 24.0°C. The lowest average night-time temperature was recorded in Abetifi located in the forest sector, reaching 21.2°C.

In *figure 6b*, we see the minimum temperature anomaly for this period. Most parts of the country experienced above normal temperatures indicating increased night-time temperatures. However, Abetifi experienced below-normal temperatures.

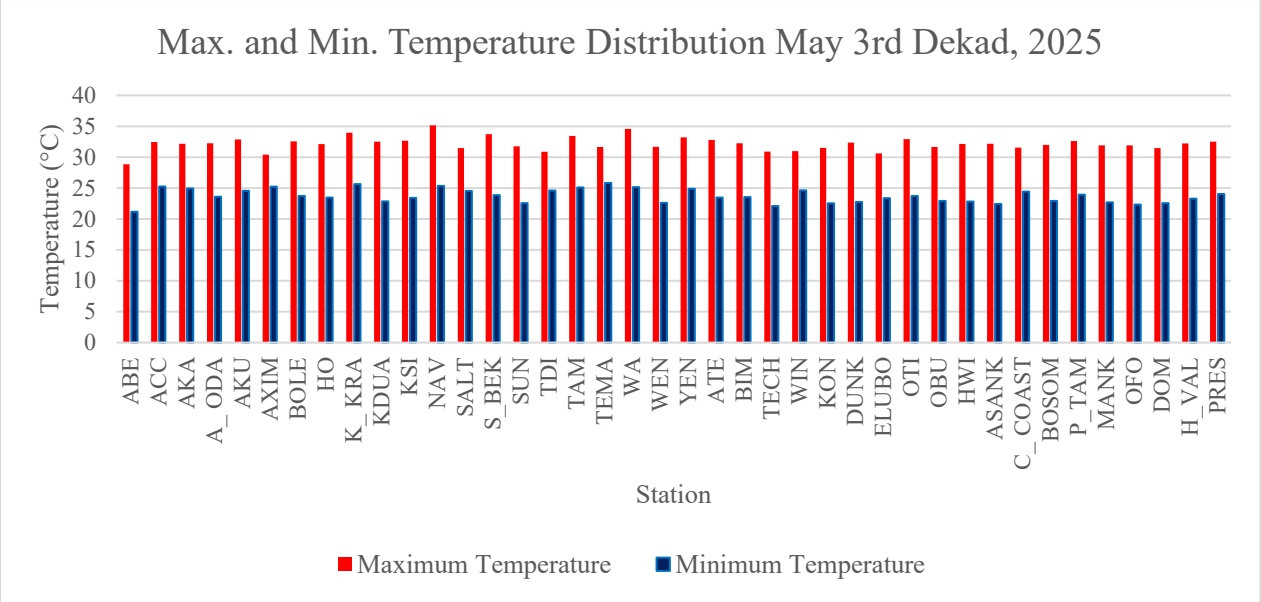


Figure 7. Max. and Min. Temperature Distribution for May 3rd Dekad, 2025

2.3 RELATIVE HUMIDITY

Observed Relative Humidity (RH) over the ten (10) day period is presented in *figure 8a* below. In the exception of the extreme northern portions that recorded lower RH values between 51 and 61 %, the rest of the country experienced relatively higher RH values ranging from 61 to 80%. The minimum value of 53% was recorded over Navrongo while a maximum value of 80% was recorded over Abetifi.

Average RH Anomaly is also presented in *figure 8b.* A below normal RH is observed the across the entire country during the period under review.

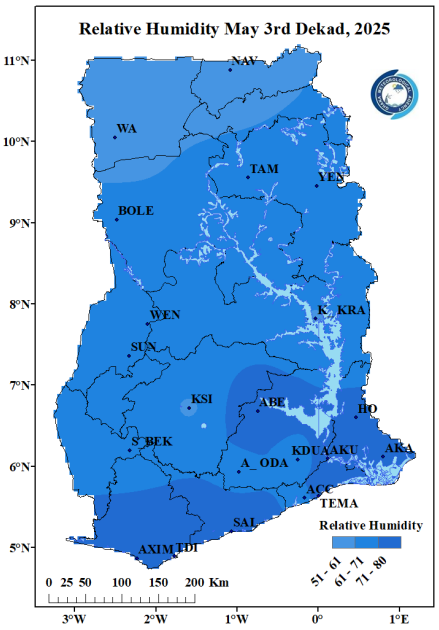


Figure 8a. Average Relative Humidity May 3rd Dekad, 2025

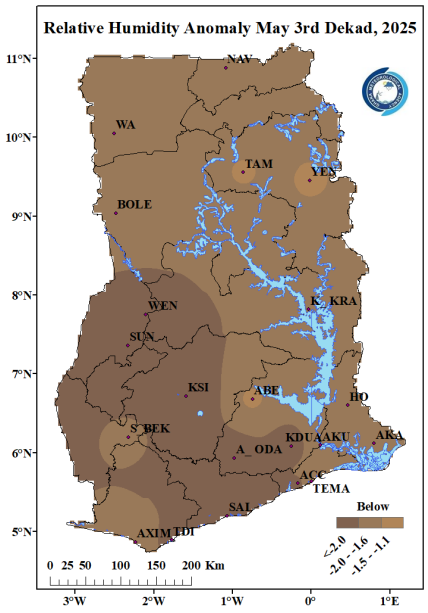
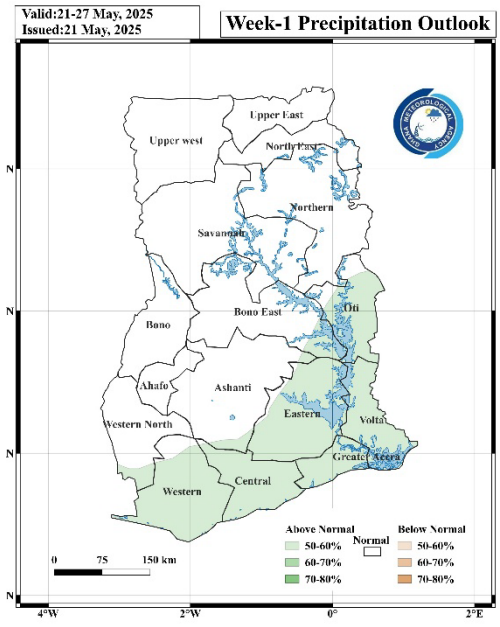
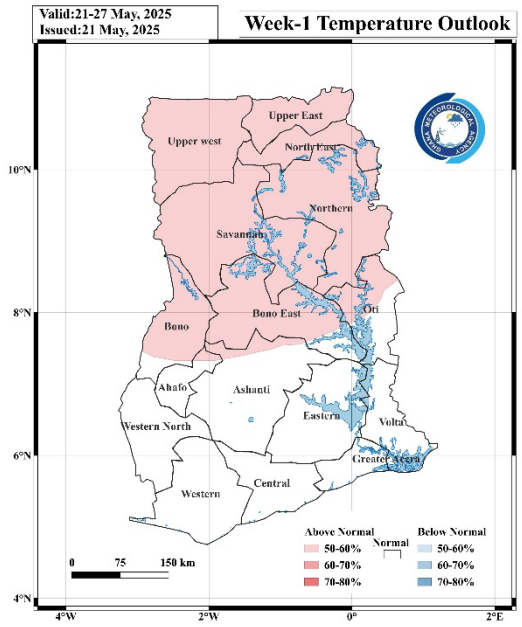


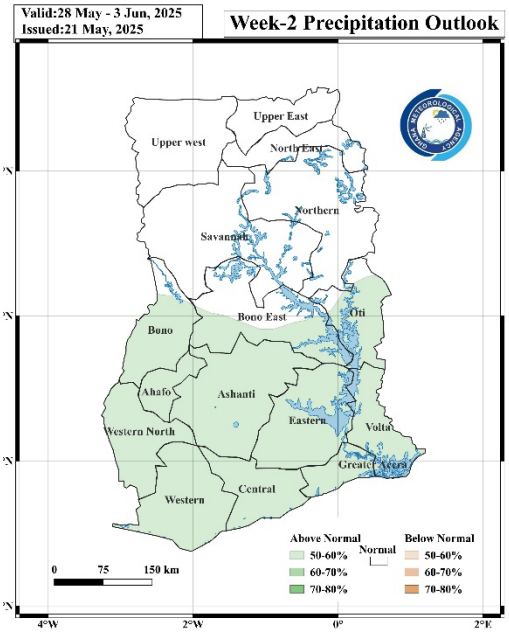
Figure 8b. Average Relative Humidity Anomaly May 3rd Dekad, 2025

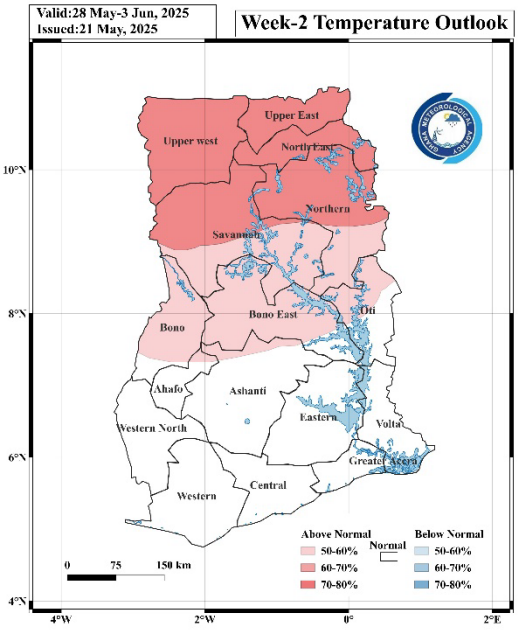
3.0 RAINFALL AND TEMPERATURE OUTLOOK 21ST May- 3RD Jun 2025

Week 1 is expected to bring above-normal rainfall to the extreme southern and southeastern regions and normal rainfall to the rest of the country, accompanied by above-normal temperatures at the northen portions of the country. In Week 2, rainfall is projected to be above normal in the south and the rest of the country is expected to experience normal rainfall, while temperatures are expected to be normal in the south and above normal at the northern portions.









4.0 ADVISORIES

1. **Flood**
    - Flash floods are likely to occur in cosmopolitan and city centres
    - People should move to higher grounds in case they stay in flood-prone areas
    - Once there is an approaching storm, citizens should move to stay indoors or move to safe places if they are outside.
2. **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.
3. **Water Resources Management Sector**
    - Conserve water and use it efficiently, especially in regions with less rainfall (Northern sector).
    - Rainwater should be harvested for use especially at places with excess rainfall
4. **General Public**
    - Above-Normal Temperatures, 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	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				

For further inquiries, clarification, information or assistance

Contact:

The Director General

Tel. +233 (0)30 701 0019 or clients@meteo.gov.gh/info@meteo.gov.gh