MONTHLY RAINFALL ANALYSIS

APRIL 2025

GHANA METEOROLOGICAL AGENCY

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APRIL 2025 RAINFALL AMOUNT & FREQUENCY OVER GHANA

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SUMMARY

April 2025 was generally more dry than the 1991–2020 average across most parts of Ghana, particularly in the southwestern and middle portions of the country, which recorded notable rainfall deficits. The southeastern parts of the country recorded higher rainy days with the rest of the country experiencing lower than the normal.

Rainfall Amount Analysis for April

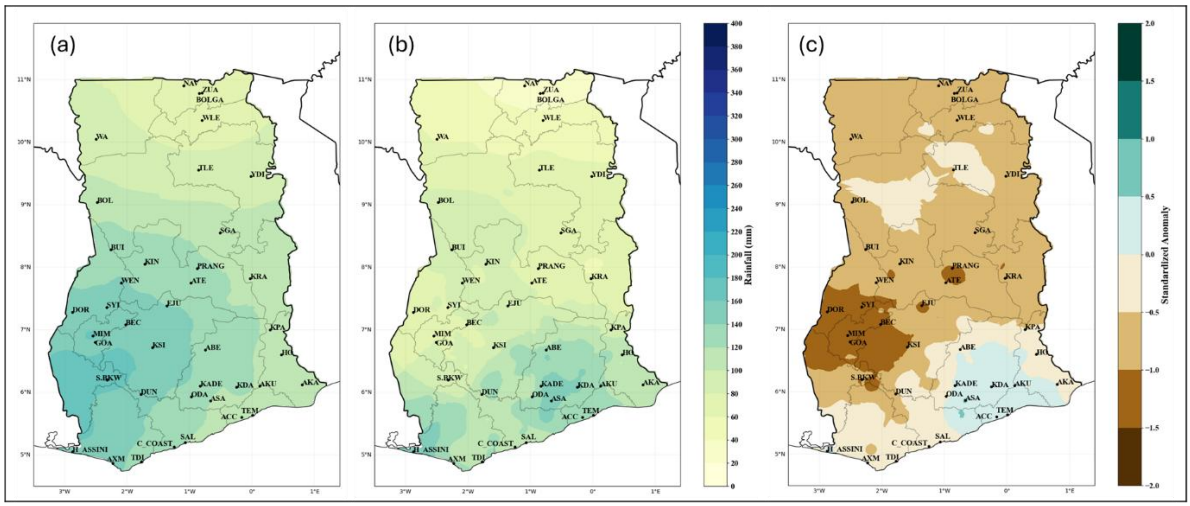

Figure 1. *(a) April Total Rainfall Climatology (1991 – 2020), (b) April 2025 Total Rainfall, (c) April 2025 Total Rainfall Anomaly*

Figure 1 illustrates the spatial distribution of April rainfall over Ghana. The April rainfall climatology (1991–2020) **(Figure 1a)** shows rainfall amounts increasing towards the southern part of the country. The highest amounts, typically exceeding 150 mm, are recorded in the southwestern and coastal regions, including parts of the Western, Central, Ahafo and Ashanti Regions. In contrast, the northern sectors, such as the Upper East, Upper West, and parts of the Northern Region, experience much lower rainfall, generally between 30 mm and 90 mm. In April 2025 **(Figure 1b)**, the rainfall distribution maintained the same general pattern, with higher rainfall in the southern and forest zones compared to the north. Stations in the forest and

coastal zones like Abetifi, Kade, Koforidua, Dunkwa on offin, Half Assini, Takoradi, Axim and its environs show rainfall above 120mm, while stations in the transition and northern zones exhibit slightly reduced values compared to the southern and forest zones. April 2025 Rainfall Anomaly **(Figure 1c)** shows standardized anomalies between April 2025 rainfall and the climatological mean. Below normal rainfall is generally seen in most part of the country with areas such as Accra, Tema, Koforidua, Akuse, Ho, Takoradi, Yendi, Tamale, Walewale and its environs experienced slightly above normal rainfall.

Rainfall Frequency Analysis for April 2025

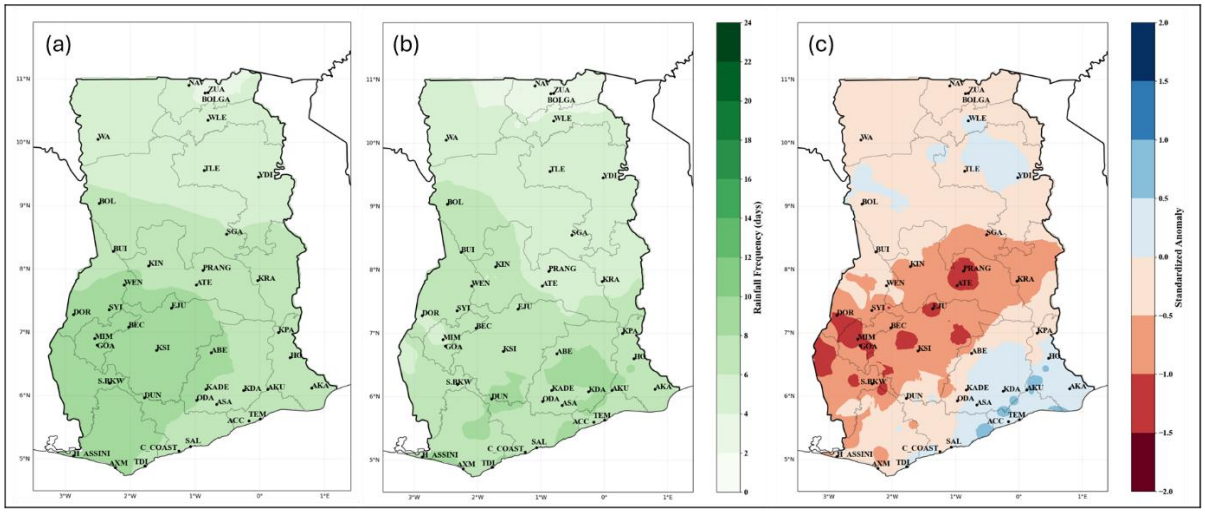

Figure 2. *(a) April Rainfall Frequency Climatology (1991–2020), (b) April 2025 Rainfall Frequency, (c) Rainfall Frequency Anomaly for April 2025*

Figure 2 shows the spatial distribution of April rainfall frequency over Ghana. The April rainfall frequency climatology **(Figure 2a)** across Ghana reveals that southern and forest zones typically experience a higher number of rainy days during April, with frequencies ranging between 9 and 15 days while the northern regions generally receive fewer rainy days around 3 to 7 days. In **Figure 2b** April 2025, rainfall frequency was broadly similar to the climatological norm, with southern and middle zones receiving more rainy days than the north. However, there is a general reduction in the number of rainy days across much of the country. While some parts of the middle and transition zones still recorded around 9–12 rainy days, most regions showed fewer rainy days than expected for April. The rainfall frequency anomaly for April 2025 (**Figure 2c)** clearly illustrates this deviation, with widespread negative anomalies across southern and central Ghana. Most areas experienced 1 to 2 fewer rainy days than the climatological average, particularly in the forest and coastal zones. The most pronounced deficits were observed in the southwestern areas (Sunyani, Sefwi Bekwai),

with anomalies reaching -2.0. Northern Ghana showed relatively neutral to slightly positive anomalies in localized pockets, indicating near-normal conditions.