FAMINE EARLY WARNING SYSTEMS NETWORK

Haiti

Monthly Climate and Weather

19 June 2025

Highlights

- ENSO-neutral conditions persisted, with near average sea surface temperatures (SSTs) covering most of the equatorial Pacific Ocean. According to the NOAA ENSO Diagnostic Discussion, ENSO-neutral is favored through the Northern Hemisphere summer 2025 (82% chance during June-August). Historically, El Niño is associated with drier-than-average conditions, while La Niña typically brings wetter than average conditions to Haiti.

- May is part of the first rainy season in Haiti, which typically starts in April and extends through June. Climatological rainfall ranges from 10 mm to 150 mm across Haiti.

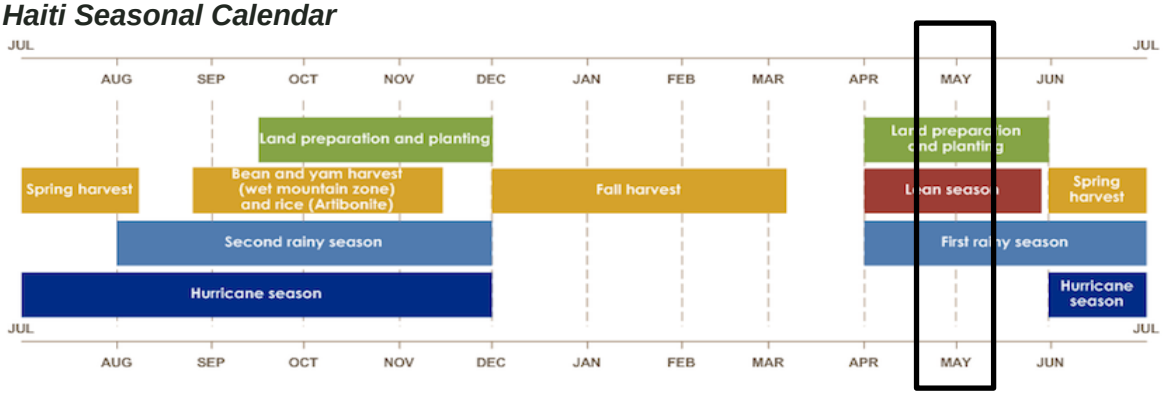
- In May, central and southern Nord-Est, Centre, the majority of Ouest and Sud-Est, eastern Nippes, northwestern and northeastern Sud, and most of Grande-Anse departments received total rainfall with values ranging from 25 mm to 50 mm, while the rest of the country observed rainfall between 5 mm and 25 mm. Negative rainfall anomalies between 10 mm and 100 mm dominated Haiti. The largest rainfall deficits (between 50 mm and 100 mm below the mean) were observed in eastern Artibonite, southern Nord and Centre departments.

- The NMME models indicate a 50% to 60% chance of below-average rainfall in central and central-eastern portions of the country. Meanwhile, for the seasonal forecast (July – September 2025), the models indicate that there is a greater than 50% chance for below-average rainfall in the east-south and central-south of Haiti, while an increased likelihood (over 70%) of above average temperatures is indicated in central-south Haiti.

- The SPI forecast suggests wetter than average conditions (SPI values ranging from 0.4 to 1.5 standard deviations above the mean) in central-west, northwestern, northeastern, and southwestern Haiti. On the contrary, negative SPI values ranging from 0.4 to 1.2 standard deviations below the mean are expected in southwestern and northeastern Ouest, southeastern Centre, and western Sud-Est.

The FEWS NET Monthly Climate and Weather information bulletin is based on current weather and climate information and monthly and seasonal outlooks from the NOAA CPC. Information on crops, soil moisture, flooding, and evapotranspiration data were produced by FEWS NET, USGS, NASA and USDA. Various sources were used to assess impacts of extreme conditions. Questions or comments about this product may be directed to Dr. Wassila Thiaw, Head, International Desks/NOAA, wassila.thiaw@noaa.gov. Questions about the USAID FEWS NET activity may be directed to Dr. James Verdin, Program Manager, FEWS NET/USAID, jverdin@usaid.gov.

Haiti Seasonal Calendar



Current Climate Modes and Teleconnections

- During May 2025, ENSO-neutral conditions persisted, with near average sea surface temperatures (SSTs) covering most of the equatorial Pacific Ocean. According to the NOAA ENSO Diagnostic Discussion, as of early May 2025, ENSO-neutral is favored through the Northern Hemisphere summer 2025 (82% chance during June-August), and it is likely to continue during the winter 2025-26; however, confidence is lower (48% chance of Neutral in November-January; **Fig. 1**). For the latest update from the NOAA Climate Prediction Center (CPC) on ENSO, check here.

- Much of the Caribbean Sea experienced slightly above average conditions with positive SSTs anomalies of 0.5–1.0°C across the region.

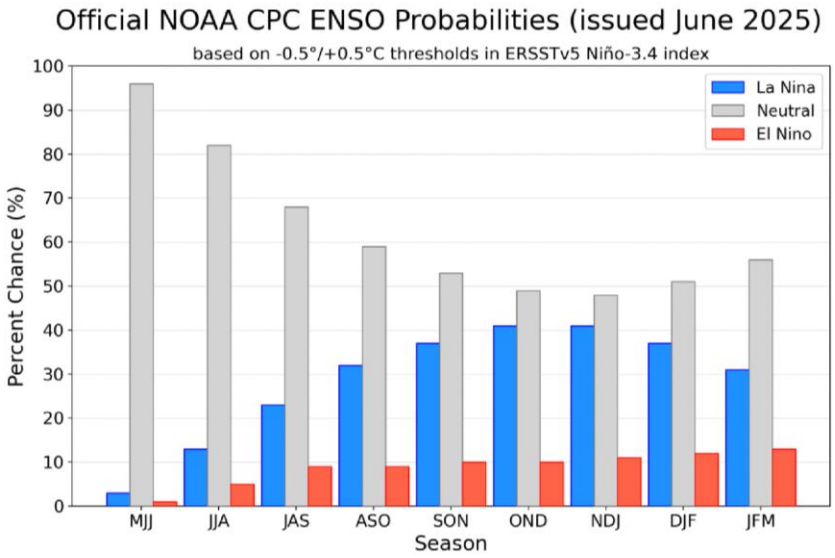


Figure 1. Official ENSO probabilities for the Niño 3.4 SST index (5ºN–5ºS, 120ºW–170ºW). Figure updated 12 June 2025. **Source: NOAA/CPC**

- Implications of ENSO conditions: Based on historical records, La Niña conditions are associated with above average precipitation throughout Haiti from June to August (**Fig. A1, left panels**). Meanwhile, La Niña conditions are related to near average mean

temperatures in Haiti (**Fig. A1, right panels**). The ENSO-precipitation teleconnection pattern can be found here, and the pattern for temperature can be found here

Extreme Events

- There have been no extreme events reported in Haiti during last month.
- There have been no reports of fire activity in Haiti during May 2025.

Rainfall/Precipitation

- May is part of the first rainy season in Haiti, which typically starts in April and extends through June. Climatological rainfall ranges from 10 mm to 150 mm over Haiti, with the highest rainfall totals generally observed in central-eastern Haiti (100-150 mm); lower rainfall amounts (10-25 mm) are climatologically expected in northwestern Nord-Ouest department.

Past 3 months (March – May 2025):

- **Totals:** Over the last three months, rainfall ranging from 100 mm to 200 mm was recorded in most parts of Haiti, but rainfall amounts between 200 mm and 300 mm were observed in southeastern Nord-Est, northern Centre, and northwestern Grande-Anse. Lesser rainfall amounts between 50 mm and 100 mm were registered over northwestern Artibonite, southern Ouest, Sud-Est, western Nippes and central Sud .

- **Anomalies:** During the past three months, above-average rainfall anomalies between 10 mm and 100 mm dominated Haiti. Localized anomalies of 100-200 mm were observed in southwestern Nord-Ouest and northwestern Grande-Anse. On the contrary, rainfall deficits ranged from 10 mm to 200 mm in Centre department and over the southern and central-east departments of the country.

Past 1 Month (May 2025):

- **Totals:** In May, central and southern Nord-Est, Centre, the majority of Ouest and Sud-Est, eastern Nippes, northwestern and northeastern Sud, and most of Grande-Anse departments received total rainfall with values ranging from 25 mm to 50 mm, while the rest of the country observed rainfall between 5 mm and 25 mm (**Fig. 2a**).

- **Anomalies:** During the past month, negative rainfall anomalies between 10 mm and 100 mm dominated Haiti. The largest rainfall deficits (between 50 mm and 100 mm below the mean) were observed in eastern Artibonite, southern Nord and Centre departments. Meanwhile, the rest of the country registered below average conditions ranging from 10 mm to 50 mm (**Fig. 2b**).

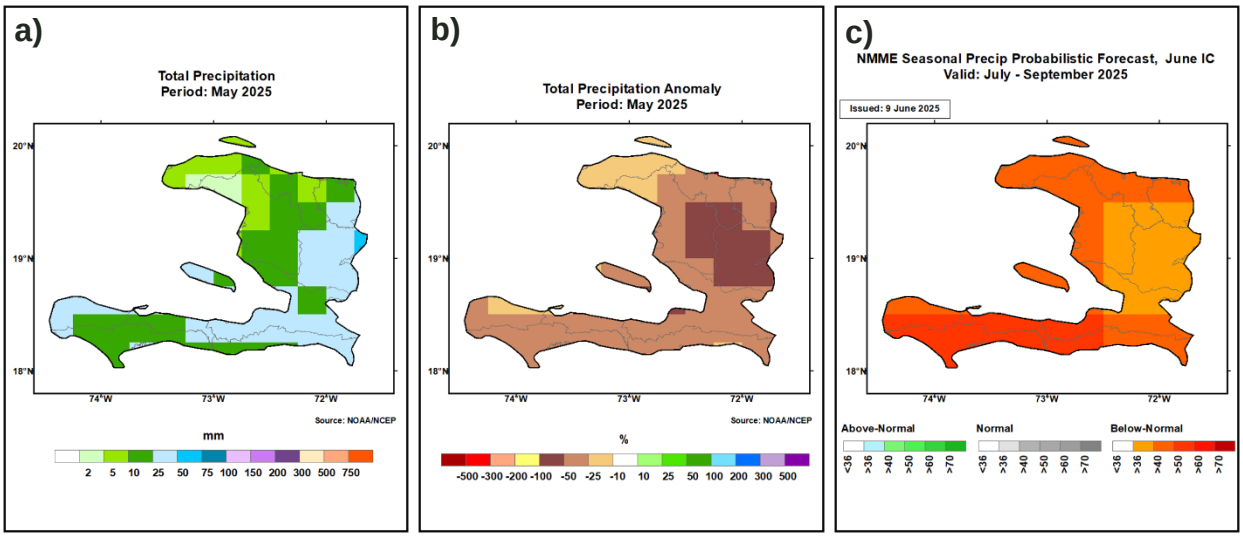


Figure 2. Satellite estimates of precipitation (CMORPH) for May 2025: **(a)** 1-month total accumulation and **(b)** 1-month anomaly. **(c)** NMME seasonal rainfall probabilistic forecast for July – September 2025. **Source: NOAA/NCEP**

Monthly and Seasonal Forecasts (June 2025 and July – September 2025):

- **Monthly:** Based on the North American Multi-Model Ensemble (NMME) models, utilizing observations from June 2025 for model initialization, the forecast for May 2025 indicates a 50% to 60% chance of below-average rainfall in central and central-eastern portions of the country.

- **Seasonal:** The NMME seasonal forecast for July – September 2025 suggests enhanced probabilities exceeding 40% for below average rainfall across southern and northern Haiti including, Sud-Est, southern parts of Quest, Nipples, Sud, western Artibonite, Nord-Quest, and parts of Nord (**Fig. 2c**).

Temperature

Past 3 months (March – May 2025):

- **Maximums:** Haiti experienced maximum temperatures ranging from 25°C to 35°C. Northwestern and portions of southwestern departments experienced slightly above average anomalies between 1°C and 2°C, while the rest of Haiti observed near average temperature anomalies between -1°C and 1°C.

- **Minimums:** Minimum temperatures ranged from 15°C to 25°C over Haiti. Northern, western, and southwestern Haiti recorded the highest minimums between 20°C and 25°C.

Near average minimum temperature anomalies of -1°C to 1°C continued across Haiti during this month.

Past 1 Month (May 2025):

- **Maximums:** During last month, maximum temperatures ranged from 25°C to 35°C in Haiti, and above average anomalies between 1°C and 2°C were observed in most of the territory. Meanwhile, northeastern Haiti registered near average temperature anomalies of -1°C to 1°C (**Fig. 3a**).

- **Minimums:** Most of Haiti recorded minimum temperatures between 20°C and 25°C. Meanwhile, southeastern Haiti observed values ranging from 15°C to 20°C. Near average minimum temperatures were observed across Haiti, with anomalies ranging from -1°C to 1°C (**Fig. 3b**).

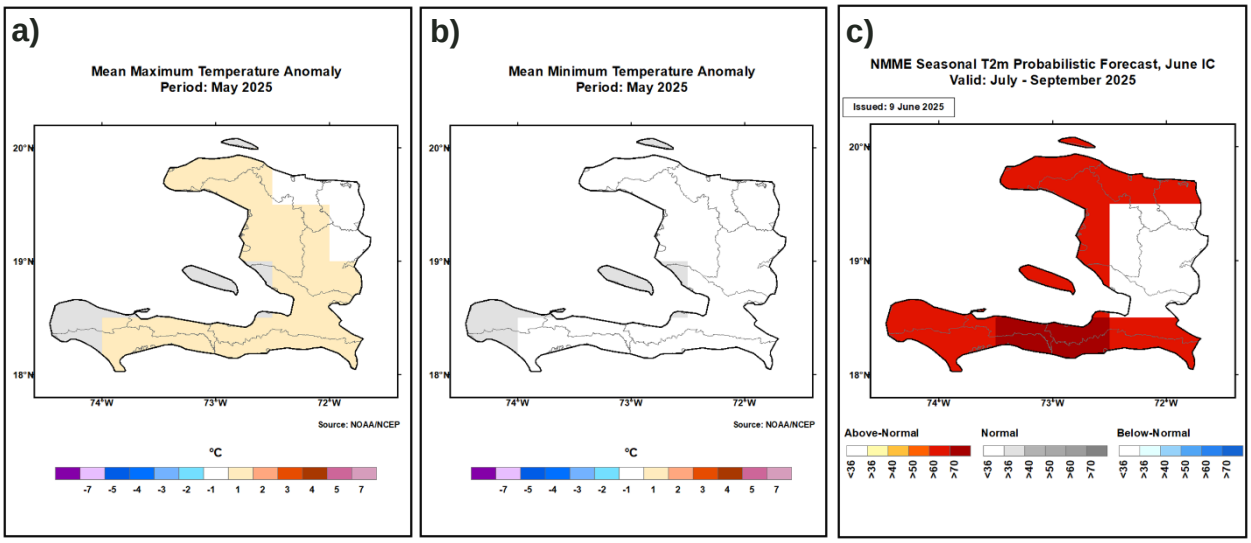


Figure 3. Spatial structure of temperature for May 2025. **(a)** Maximum temperature anomaly and **(b)** minimum temperature anomaly. **(c)** NMME probabilistic forecast of seasonal 2-m temperature anomaly for July – September 2025. **Source: NOAA/NCEP**

Monthly and Seasonal Forecasts (June 2025 and July – September 2025):

- **Monthly:** The NMME forecast indicates no clear dominant signal for either below or above average temperatures in Haiti during June.

- **Seasonal:** For the July – September 2025 season, there is an increased likelihood (over 70%) of above average temperatures in central-south Haiti. Meanwhile, there are 60% to 70% chances of above average temperatures in the northern, western, and southwestern and southeastern regions of Haiti. In contrast, there is no clear signal for near-, above-, or below-average temperatures in the central-east regions of the country (**Fig. 3c**).

Drought and Dryness

The Standardized Precipitation Index (SPI) is used to characterize meteorological drought. SPI compares the precipitation over a specific period of time with the climatology from that same period. Therefore, the SPI values can be thought of as the number of standard deviations the observed anomaly deviates from the climatology. The 1-month SPI values are a good representation of the monthly precipitation anomaly as well as the soil moisture and vegetation health. The 3-month SPI values are a good representation of seasonal precipitation anomalies. The Standardized Precipitation Evapotranspiration Index (SPEI) is similar to the SPI, but it also takes evapotranspiration into account (and therefore the impact of temperatures on water demand).

Past 3 Months (March – May 2025):

- The SPI analysis for the past 3 months indicated wetter than average conditions (SPI values of 0.4 to 1.5 standard deviations above the mean) dominated over northern, central-west, central-east, and southwestern areas in Haiti. On the contrary, northwestern, northeastern and southwestern Ouest, western Sud-Est and southeastern Centre departments experienced drier than average conditions (SPI values of 0.4 to 1.2 standard deviations below the mean).

Past 1 Month (May 2025):

- The SPI analysis for May 2025 indicated that Haiti experienced drier than average conditions (SPI values of 0.4 to 2 standard deviations below the mean) across the country, except for southwestern and southeastern Haiti that observed near average SPI conditions.

Current/Forecast (28 February2025 to 28 May 2025):

- The SPI forecast suggests wetter-than-average conditions (SPI values ranging from 0.4 to 1.5 standard deviations above the mean) in central-west, northwestern, northeastern and southwestern Haiti. On the contrary, negative SPI values ranging from 0.4 to 1.2 standard deviations below the mean are expected in southwestern and northeastern Ouest, southeastern Centre and western Sud-Est. Meanwhile, the rest of the country expect near average SPI conditions.

Water Requirement Satisfaction Index (WRSI)

- USGS/EROS crop WRSI: Current conditions during the 3rd Dekad of May 2025 depicted '*Average'* to '*Good*' crop conditions across much of the country. Local areas of Centre and southern Ouest departments depicted '*Very good'* conditions, while areas in southern Nord-Ouest and northwestern Artibonite departments depicted '*Failure*' to *'Mediocre'* conditions.

GEOGLAM Crop Monitor

- GEOGLAM Crop Monitor synthesis indicated that 'Watch' conditions continued across Haiti for maize and rice during May 2025.

Additional Resources

- https://protectioncivile.gouv.ht/
- https://www.meteo-haiti.gouv.ht/

Annex

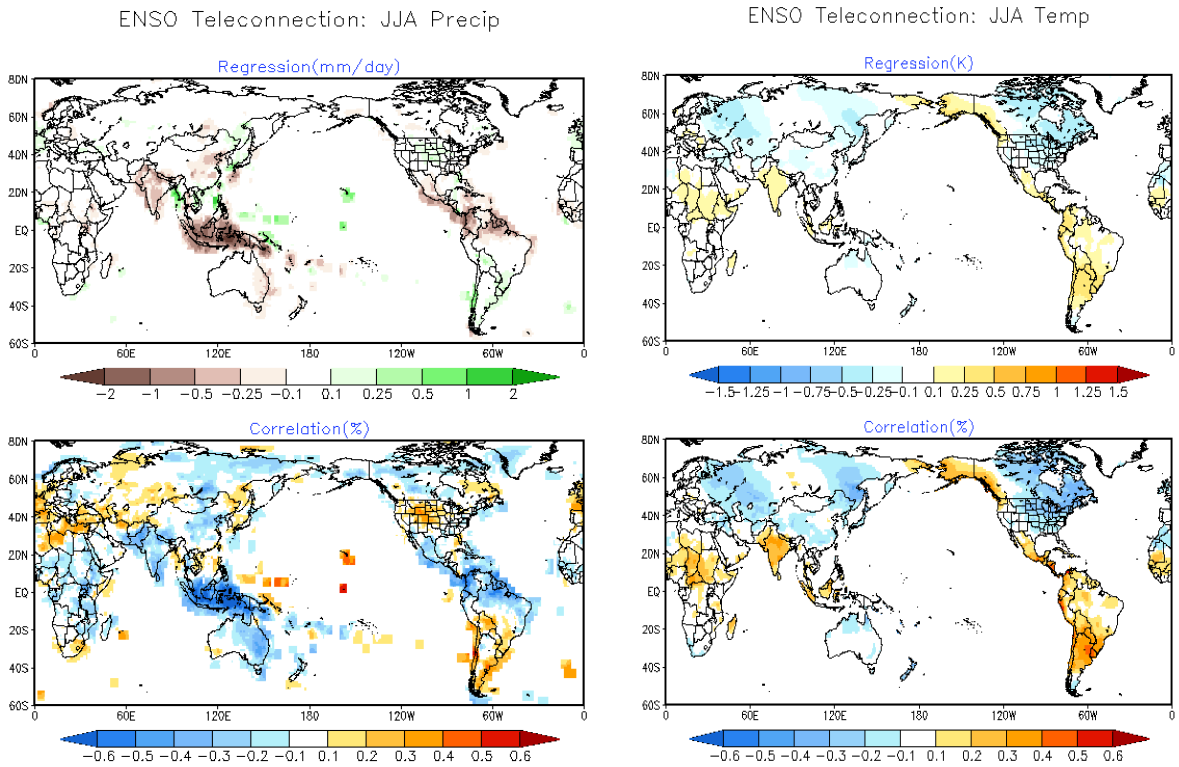


Figure A1. ENSO teleconnection for the June-August season. The upper-level panel shows the precipitation and temperature anomalies regressed onto the standardized Niño-3.4 index. The bottom panel shows the correlation between Nino-3.4 and the anomalies.
Source: https://www.cpc.ncep.noaa.gov/products/precip/CWlink/ENSO/regressions/