

FAMINE EARLY WARNING SYSTEMS NETWORK

Democratic Republic of Congo

Monthly Climate and Weather

15 May 2025

Highlights

- In April 2025, the **El Niño Southern Oscillation (ENSO)**-neutral conditions continued during April 2025. Near average sea surface temperatures (SSTs) dominated across much of the equatorial Pacific Ocean. The ENSO outlooks anticipate ENSO-neutral to continue with a 74% chance during June – August 2025 and persist with over 50% chance through August – October 2025.
- In April 2025, much of the Democratic Republic of Congo (DRC) saw above average **rainfall**. The western and southern provinces saw above average rainfall (25-200 mm), while central, northern, and eastern areas had deficits of 10-100 mm, with some northeastern regions reporting below average rainfall of 100-200 mm. In June, Tshopo, Sankuru, Maniema, Nord-Kivu, Sud-Kivu, and Ituri expect above average rainfall, whereas Sud-Ubangi and Bas-Uele anticipate below average conditions.
- The country saw above average **maximum temperatures**, with areas like eastern Haut-Katanga recording anomalies up to 3°C. In contrast, western, central, and eastern regions had near average temperatures. Most of the DRC experienced near average **minimum temperatures**, except for the northeastern and some central and southern regions, which were slightly above average by 1-2°C. In June 2025, much of the DRC is expected to have above average temperatures, particularly in central and northeastern provinces, with over a 50% chance.
- The **Standardized Precipitation Index (SPI)** analysis for April 2025 shows that much of the DRC experienced drier than average conditions, while near normal to wetter than average conditions were observed in parts of the eastern and southern regions. The SPI forecast for DRC predicts drier than average conditions in most areas, while parts of the north, central, and south may experience near normal to wetter than average conditions. Notably, SPI over the southern Tshopo province is forecasted to exceed 2.0 standard deviations above the mean.



Figure 1: Seasonal calendar for DR Congo. Source: FEWS NET

Current Climate Modes and Teleconnections

- During April 2025, ENSO-neutral conditions continued, with near-average SSTs across much of the equatorial Pacific Ocean. Subsurface temperatures were mostly near average in the central and eastern Pacific, but remained above average at depth in the western Pacific.
- The ENSO outlook indicates that ENSO-neutral conditions will continue, with a 74% chance during June – August 2025 and persist, with more than 50% through August – October 2025 (**Fig. 2**). The latest update of the NOAA Climate Prediction Center's ENSO diagnostic discussion can be found [here](#).

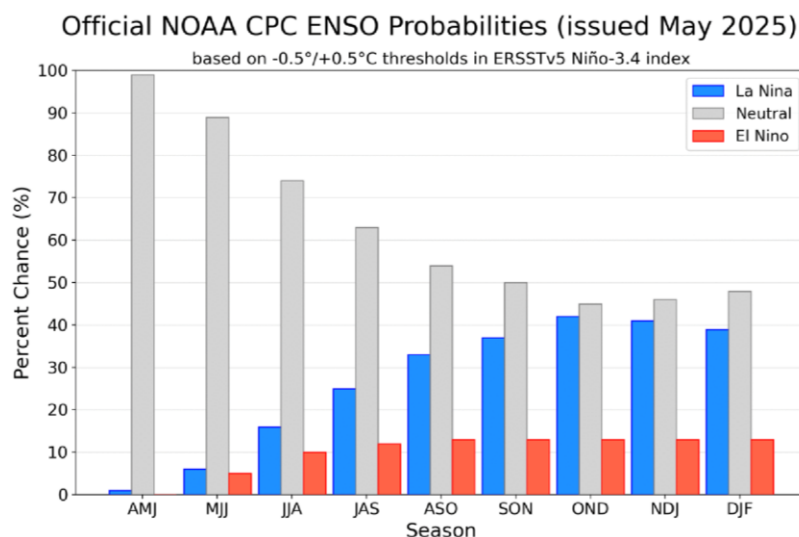


Figure 2: Official CPC ENSO probabilities outlook. **Source:** NOAA/NCEP

Extreme Events

- In the Democratic Republic of the Congo, [11,569 high-confidence fire alerts](#) have been reported by VIIRS so far in 2025. In the last 4 weeks, the region with the most significant number of fire alerts was Nord-Kivu, with 45 fire alerts. This accounts for 14% of all alerts detected in the Democratic Republic of the Congo and is unusually high compared to the number of fires recorded during the same period since 2012.
- Over the past month, persistent heavy rainfall has caused flooding, resulting in casualties and damage in Kinshasa (the capital) and Tanganyika Provinces.

Rainfall/Precipitation

Past 3 months (February 2025 to April 2025):

- **Total:** For the past three months, much of the DRC has experienced extremely heavy rainfall (300-750 mm). Along the northern borders of Bas-Uele, Haut-Uele, and the eastern border of Ituri provinces, rainfall was between 200 and 300 mm. The heaviest rainfall (>750 mm) was recorded over western and northern parts of Equateur, northern Maniema, and localized places in Mai-Ndombe, Kasai-Central, Maniema, Nord-Kivu, and Sud-Kivu provinces (**Fig. 3a**).
- **Anomalies:** Rainfall was above average by 25 to 100 mm in many areas of the DRC. Significant rainfall surpluses reaching 200-300 mm were registered in the western and central provinces, whereas rainfall surpluses of 300-500 mm and over were experienced in Equateur's western and northern parts. In contrast, the northeastern and parts of the eastern regions experienced below average rainfall (10-100 mm). Severe rainfall deficits were noted in provinces such as Tshopo, Bas-Uele, Haut-Uele, and Ituri Sud-Kivu, recording 100 to 200 mm below average rainfall (**Fig. 3b**).

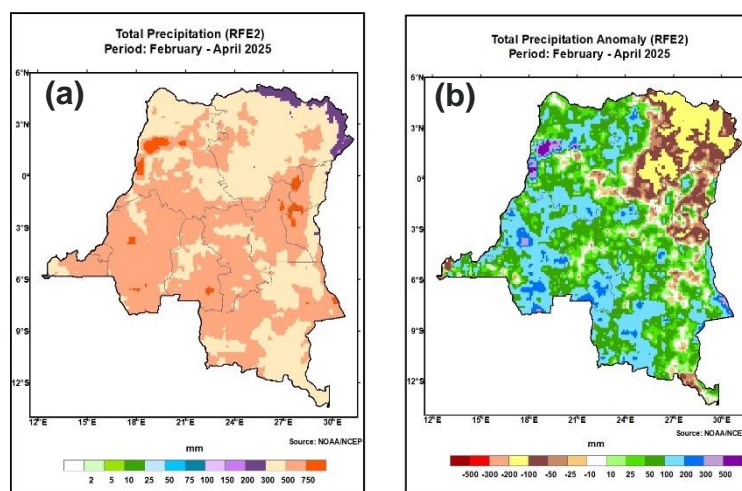


Figure 3: Spatial distribution for February 2025 – April 2025 (a) total precipitation and (b) total precipitation anomaly. **Source: NOAA/NCEP**

Past 1 Month (April 2025):

- **Totals:** Much of the DRC experienced heavy rainfall, reaching between 100 and 300 mm and exceeding 300 mm in pocket areas over western and eastern provinces. The western part of Kongo-Central, northern Haut-Lomami, and southern Haut-Katanga provinces received 10-100 mm of rainfall (**Fig. 4a**).
- **Anomalies:** Much of the DRC, particularly the western and southern provinces, experienced above-average rainfall (25-200 mm). In contrast, parts of the central, northern, and eastern provinces saw a deficit of 10-100 mm, while pocket areas in the northeast recorded 100-200 mm below average rainfall (**Fig. 4b**).

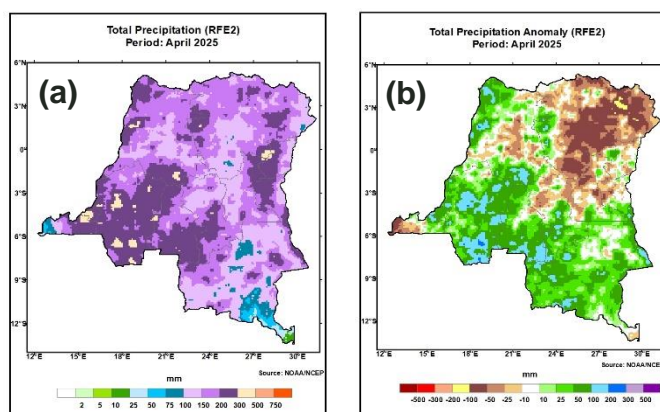


Figure 4: Spatial distribution for April 2025 (a) total precipitation and (b) total precipitation anomaly. **Source: NOAA/NCEP**

Monthly (June 2025) and Seasonal (June 2025 – August 2025) Forecasts:

- **Monthly:** In June, above normal rainfall is favored in pocket areas in Tshopo, Sankuru, Maniema, Nord-Kivu, Sud-Kivu, and Ituri provinces. In contrast, below normal rainfall is expected in localized places in Sud-Ubangi and Bas-Uele provinces (**Fig. 5a**).
- **Seasonal:** Above normal rainfall is expected in pocket areas in Sankuru, Maniema, Nord-Kivu, and Sud-Kivu provinces. The western part of Equateur, northern Mai-Ndombe, southern Tshuapa, and the northern part of Bas-Uele provinces are expected to experience below normal rainfall (**Fig. 5b**).

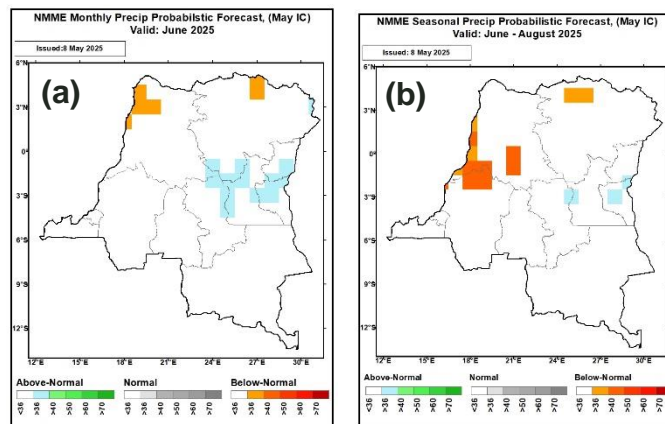


Figure 5: Rainfall forecast for (a) June 2025 and (b) June 2025 - August 2025. **Source:** NOAA/NCEP

Temperature

Past 3 months (February 2025 to April 2025):

- **Maximums:** Over the last three months, the DRC has experienced maximum temperatures ranging from 20 to 40°C. The highest temperature recorded was 40°C along the northern borders of Sud-Ubangi, Nord-Ubangi, and Bas-Uele provinces. Most areas of the DRC recorded above average maximum temperatures, although some regions in the west-central and northeastern areas experienced near average maximum temperatures. The southern part of Lualaba and much of Haut-Katanga provinces saw significant maximum temperatures of 3°C above average (**Fig. 6a**).
- **Minimums:** Mean minimum temperatures in the DRC over the past three months were 20°C in most areas of the country and 15°C along the eastern border and parts of southwestern and southern regions. Near average minimum temperatures were recorded in much of the DRC, except in the northeastern region, and parts of the central and southern regions, which experienced slightly above average minimum temperatures of 1-2°C (**Fig. 6b**).

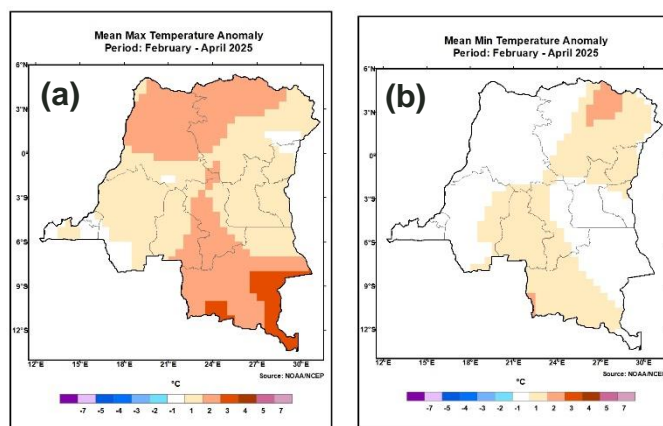


Figure 6: Spatial distribution for February 2025 – April 2025 (a) mean maximum temperature anomaly and (b) mean minimum temperature anomaly. **Source: NOAA/NCEP**

Past 1 Month (March 2025):

- **Maximums:** Mean maximum temperatures in the DRC ranged from 20°C to 35°C. In many areas, the country experienced above average maximum temperatures (1-2°C). The eastern part of Haut-Katanga province experienced anomalies of 3°C above average. In contrast, near average conditions occurred in parts of the west, central, and eastern regions of the country (**Fig. 7a**).
- **Minimums:** Mean minimum temperature over the last month in the DRC ranged from 15°C to 20°C. The eastern borders and parts of the southwestern and southern regions experienced minimum temperatures of 15°C. Near average minimum temperatures were recorded in much of the DRC, except in the northeastern region, and parts of the central and southern areas, which experienced slightly above average minimum temperatures of 1-2°C (**Fig. 7b**).

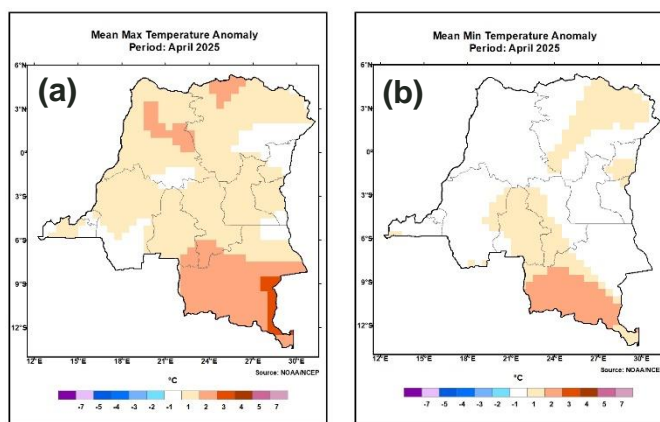


Figure 7: Spatial map for April 2025 (a) mean maximum temperature anomaly and (b) mean minimum temperature anomaly. **Source: NOAA/NCEP**

Monthly (June 2025) and Seasonal (June 2025 – August 2025) Forecasts:

- **Monthly:** In June 2025, DRC is expected to have above normal temperatures in much of the country. Pocket areas in the central and northeastern provinces are favored to have a greater than 50% probability of above normal mean temperatures (**Fig. 8a**).
- **Seasonal:** Above normal mean temperatures are expected in the DRC from June to August 2025. Parts of the north, central, and pocket areas in the east and the southern regions are favored to have a greater than 50% probability of above normal mean temperatures (**Fig. 8b**).

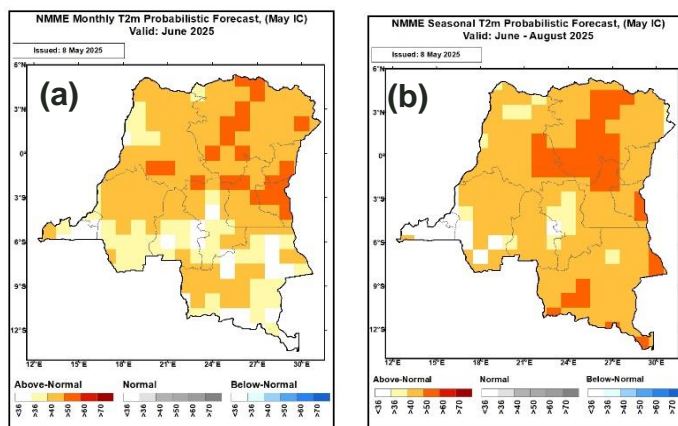


Figure 8: Spatial map for (a) June 2025 mean temperatures forecast and (b) June 2025 – August 2025 mean temperatures forecast. **Source:** NOAA/NCEP

Flooding and Areas of Inundation

- Continuous heavy rainfall during the last month has led to flooding, causing casualties and destruction in Kinshasa (the capital) and Tanganyika Provinces.

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 (February 2025 to April 2025):

- From February 2025 to April 2025, the northern, western, and parts of the central and northeastern regions experienced drier than average conditions. Regions with an SPI greater than 2 standard deviations below the mean were observed in pocket areas in the central and northern provinces. In contrast, near average to wetter than average conditions were noted in parts of the eastern and southern areas of the country. The southern part of Haut-Katanga province experienced an SPI of 1.5-2.0 standard deviations above the mean (**Fig. 9a**).

Past 1 Month (March 2025):

- In April 2025, much of the DRC experienced drier than average conditions. Near to wetter than average conditions were observed in parts of the eastern and southern regions (**Fig. 9b**).

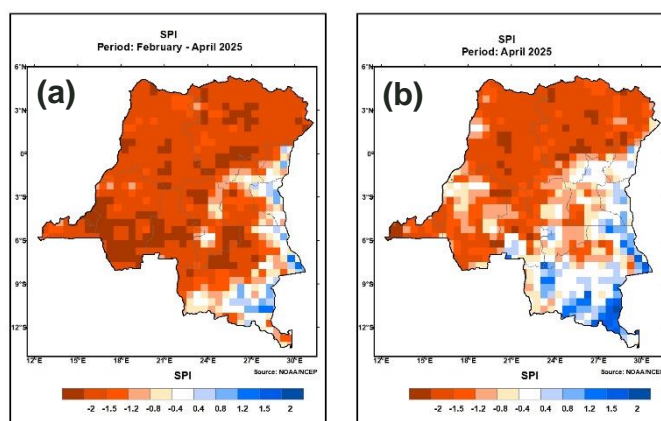


Figure 9: Spatial structure of Standardized Precipitation Index (SPI) (a) February 2025 – April 2025 (b) April 2025. Source: NOAA/NCEP. **Source: NOAA/NCEP**

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

- The SPI forecast suggests that drier than average conditions will occur in the west-central, parts of the north, eastern, and southern regions of the DRC. Parts of the north, central, and southern provinces are likely to receive near normal to wetter than average conditions. The southern part of Tshopo province will likely experience an SPI greater than 2.0 standard deviation above the mean (**Fig. 10**).

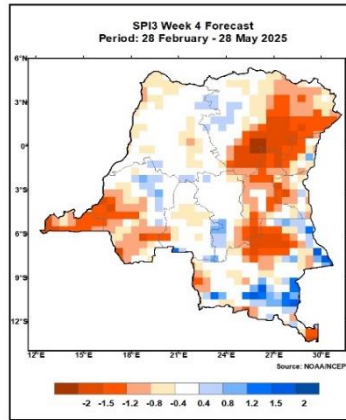


Figure 10: Spatial structure of SPI constructed from observations for 28 February 2025 to 30 April 2025 and a 4-week forecast ending on 28 May 2025. **Source:** NOAA/NCEP

Water Requirement Satisfaction Index (WRSI)

- Not Available

GEOGLAM Crop Monitor

The Democratic Republic of the Congo is currently harvesting main season sorghum and second season maize in the center and southeast, while planting continues in the north and east. Rainfall has been average to slightly below average since October 2024, except in the east and west, where it has been wetter than average. However, heavy rains in April led to severe flooding in Tanganyika Province and landslides in Kinshasa. Ongoing conflict in eastern provinces is worsening food insecurity, particularly in Ituri, North Kivu, South Kivu, and Tanganyika. Despite these challenges, overall agricultural conditions are still favorable.

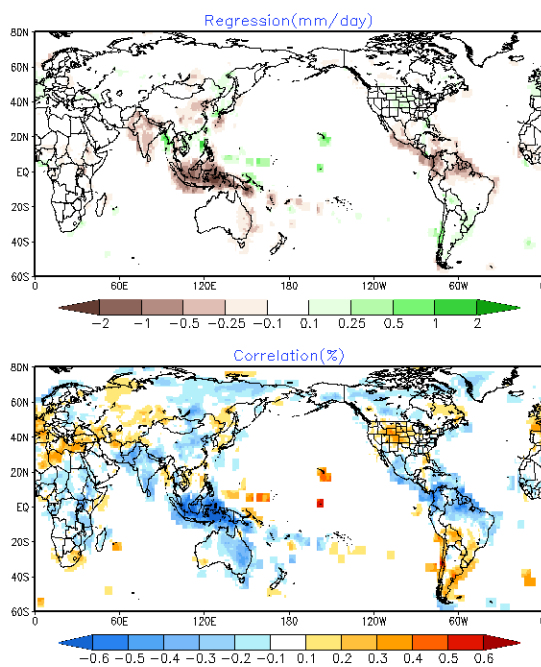
Additional Resources

<https://www.sadc.int/pillars/meteorology>

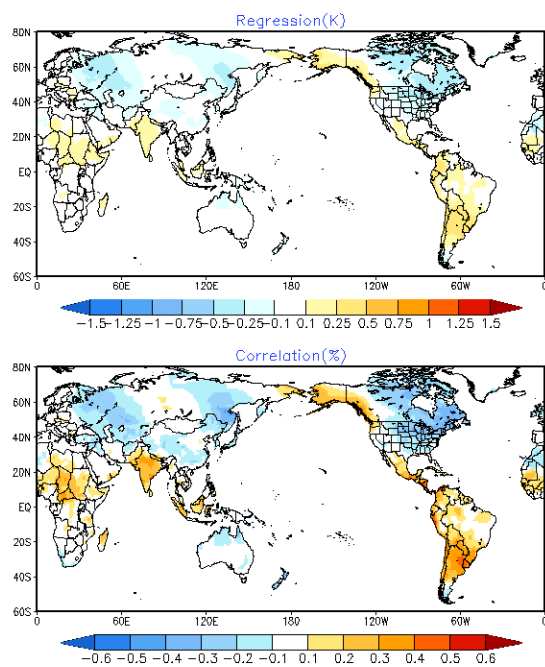
<https://fews.net/node/32023/print/download>

Annex

ENSO Teleconnection: JJA Precip



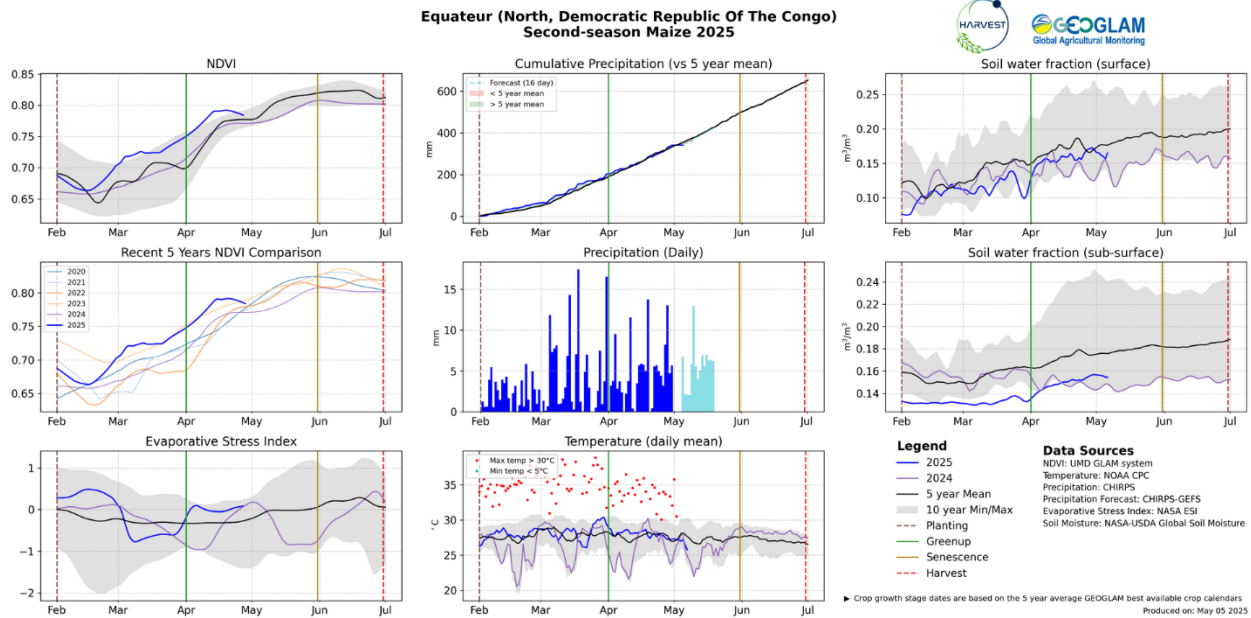
ENSO Teleconnection: JJA Temp



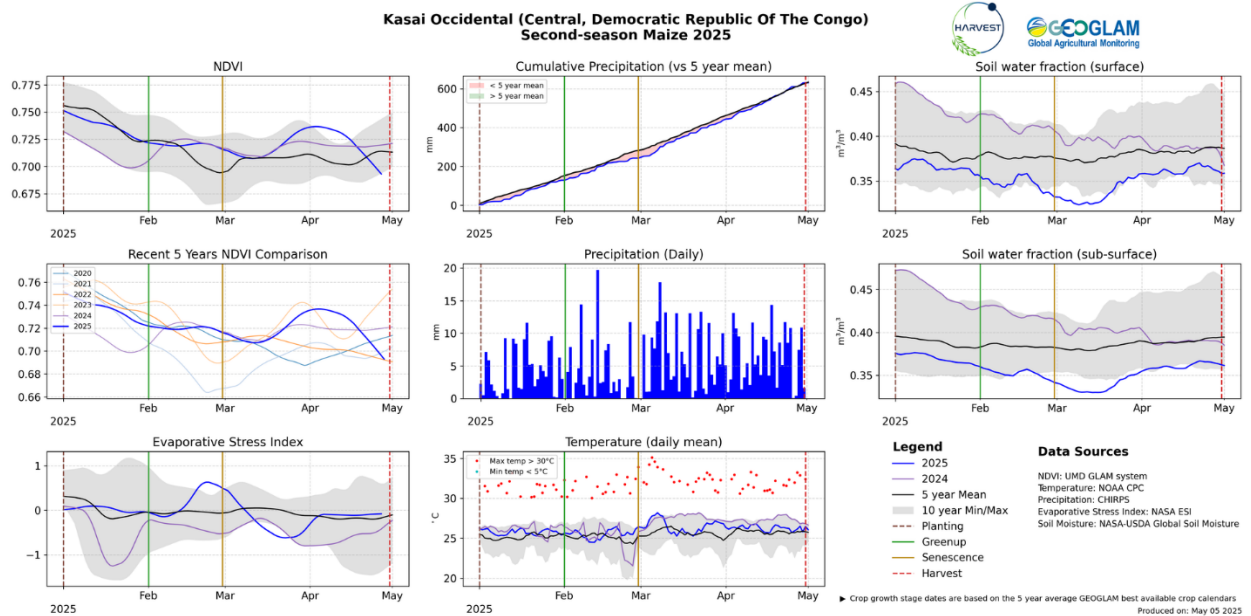
GEOGLAM Agro-meteorological Earth Observation Indicators:

Second-Season Maize

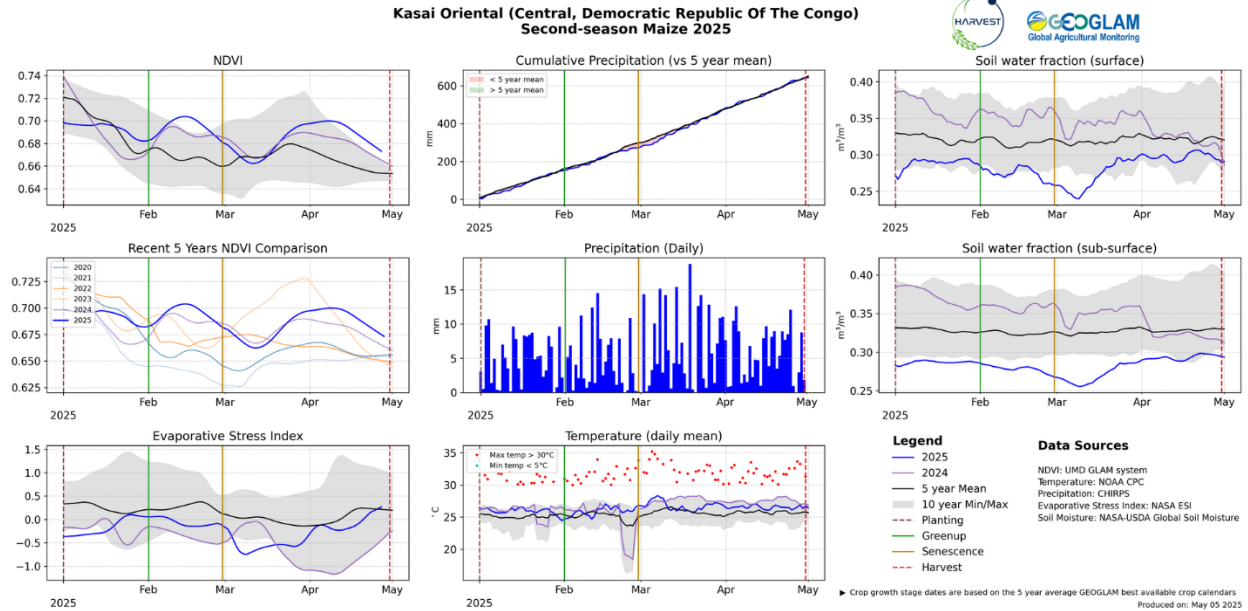
Equateur:



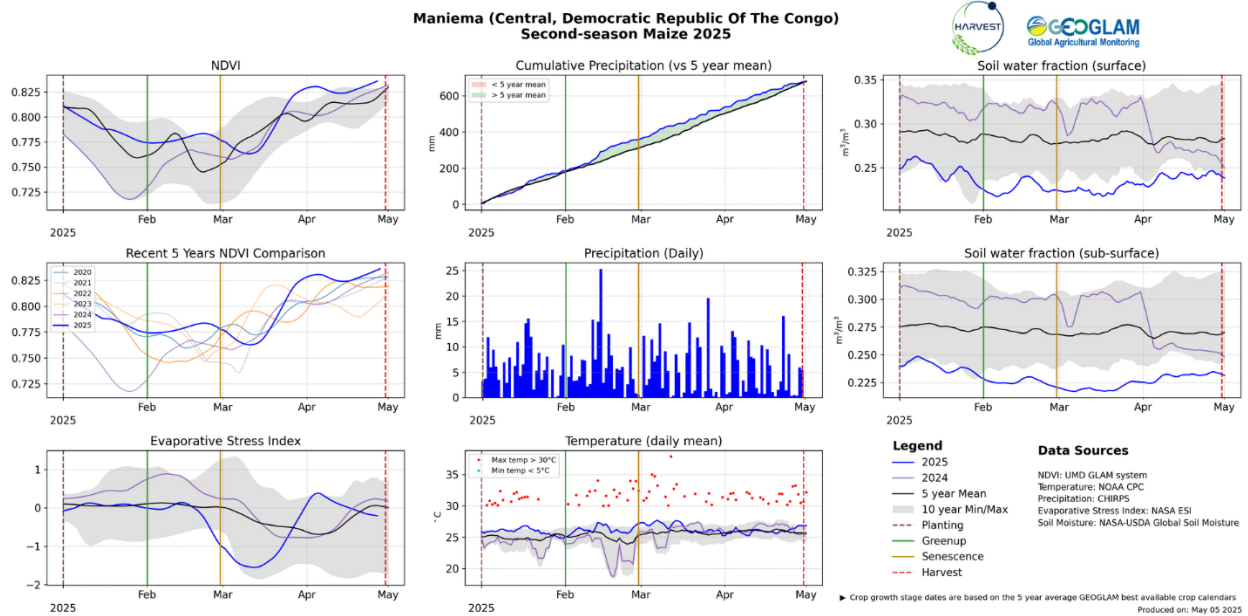
Kasai Occidental:



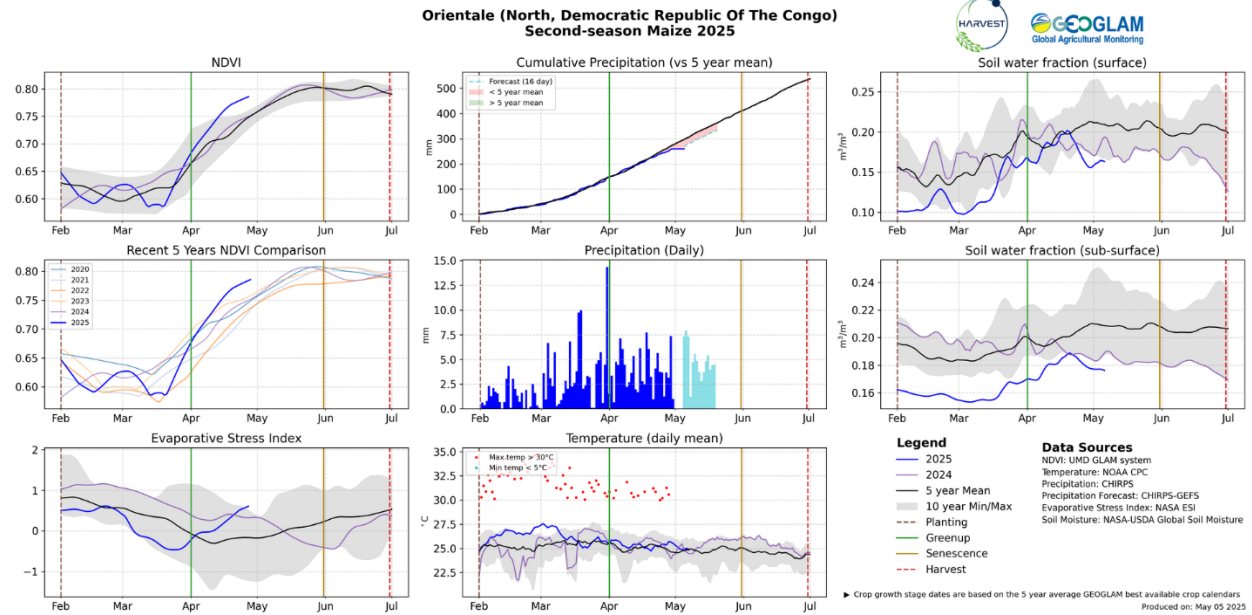
Kasai Oriental:



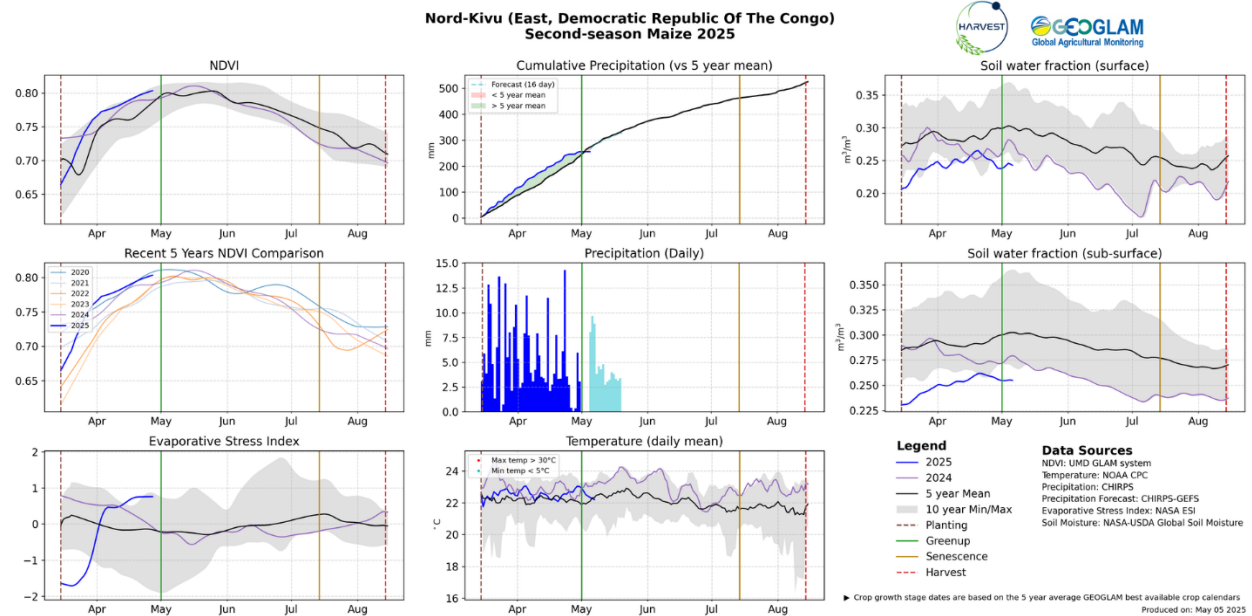
Maniema:



Orientele:



Nord-Kivu:



Sud-Kivu:

