FAMINE EARLY WARNING SYSTEMS NETWORK

# *Zimbabwe*

# Monthly Climate and Weather

**19 June 2025**

## Highlights

- El Niño Southern Oscillation (ENSO)-neutral conditions persisted in the past month, with near average equatorial sea surface temperatures (SSTs) across the Pacific Ocean.
- Based on dynamical models, ENSO-Neutral is likely in the Northern Hemisphere summer 2025 (82% chance in June-August) and may continue into winter 2025-26, though confidence is lower (48% chance of Neutral and 41% chance of La Niña in November-January).
- Most regions of Zimbabwe are climatologically dry during May. Five to 25mm total rainfall was recorded in parts of northern, northeastern, central and eastern Zimbabwe during May 2025.
- Maximum temperatures were 1 to 3°C above average in parts of northern, western, central-eastern and southern Zimbabwe in May 2025. Minimum temperatures were 1 to 2°C above average in parts of northern and western Zimbabwe and slightly below average in isolated places in southern Zimbabwe.
- The Standardized Precipitation Index (SPI) analysis for May 2025 indicated wetter than average conditions in parts of eastern Zimbabwe.
- Based on the North American Multi-Model Ensemble (NMME) models, there is a slight tilt in the odds to favor below-average rainfall in parts of southeastern Zimbabwe in July 2025.
- Based on the NMME models, there is a slight tilt in the odds to favor above-average temperatures in northwestern, eastern, southeastern and some parts of southern Zimbabwe in July 2025.

*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.*

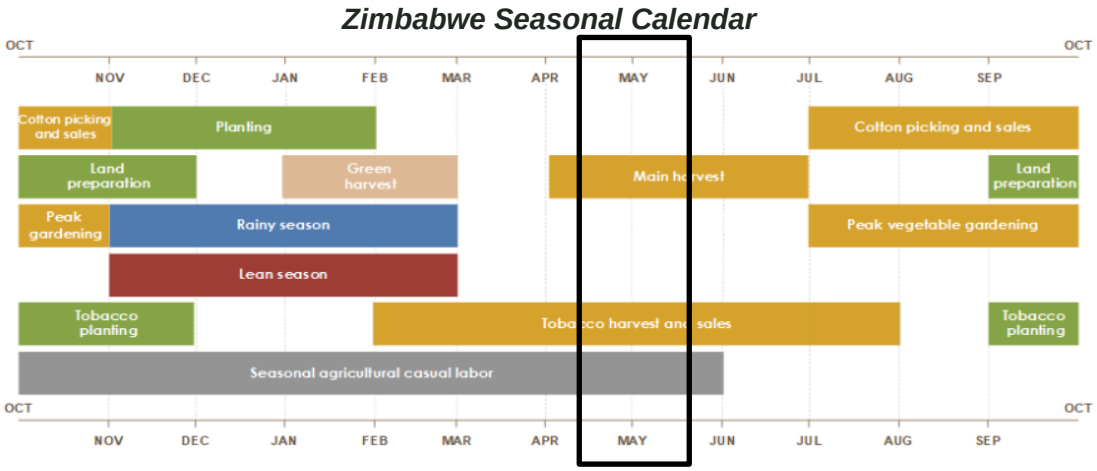


**Figure 1:** Seasonal calendar for Zimbabwe. **Source: FEWS NET**

## Current Climate Modes and Teleconnections

- During the last 4 weeks, equatorial SSTs were above average in the far western Pacific Ocean, near average in the central Pacific Ocean, and below average between 140°W and 90°W.

- Based on dynamical models, ENSO-Neutral is likely in the Northern Hemisphere summer 2025 (82% chance in June-August) and may continue into winter 2025-26, though confidence is lower (48% chance of Neutral in November-January).

- Based on historical record, ENSO-neutral conditions are typically associated with near-average precipitation conditions (mostly dry conditions) in Zimbabwe during the May-June-July (MJJ) season. ENSO-neutral conditions are also associated with near average conditions across Zimbabwe during the MJJ season (**Figure S1**).

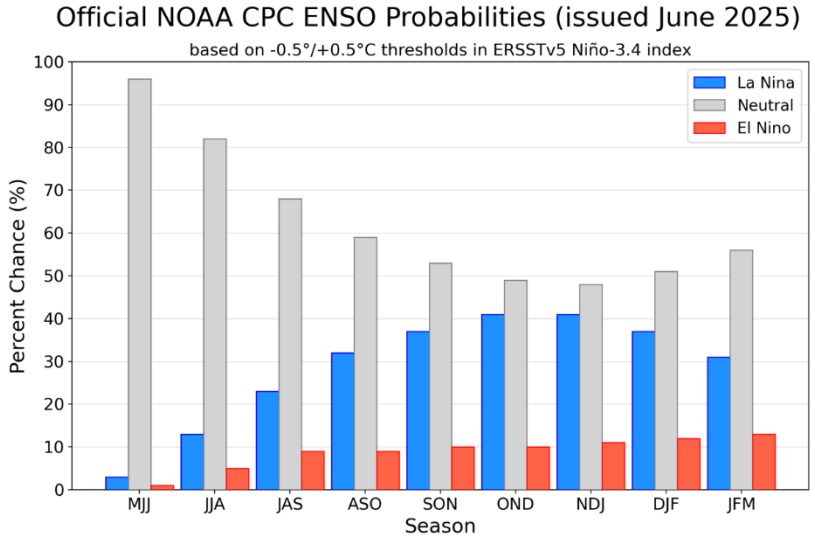


**Figure 2:** Official ENSO probabilities for the Niño 3.4 Sea surface temperature index (5°N-5°S, 120°W-170°W). **Source: NOAA/NCEP**

## Extreme Events

- There were no impacts of tropical storms over the past 30 days across Zimbabwe. Based on available data, no tropical storms are expected in the coming weeks.
- There were 62 notable fire alerts in Mashonaland West province of Zimbabwe over the past 4 weeks.
- Stronger-than-average easterly winds were observed at lower level in parts of eastern and central Zimbabwe over the past 30 days.

## Rainfall/Precipitation

### Past 3 months (March 2025 – May 2025):

- **Totals:** Most parts of Zimbabwe recorded 50 to 100mm total rainfall (**Fig. 3a**). Higher amounts (100 to locally up to 200mm) were observed in parts of northern, eastern and southern Manicaland, central and southern Mashonaland East, northwestern and western Matabeleland North. Ten to 50mm precipitation fell in parts of southern Zimbabwe. **Table 1** shows the average rainfall for provinces of Zimbabwe.

- **Anomalies:** The observed rainfall was 25 to 100mm below average in parts of northwestern, northeastern, central, eastern, southwestern and southern Zimbabwe, with the largest deficits of up to 200mm occurring in some parts of northern Midlands (**Fig. 3b**). Rainfall was above average by 25 to 50mm in parts of southern Manicaland, northwestern Matabeleland North, central Masvingo, and central Mashonaland East parts of Zimbabwe.

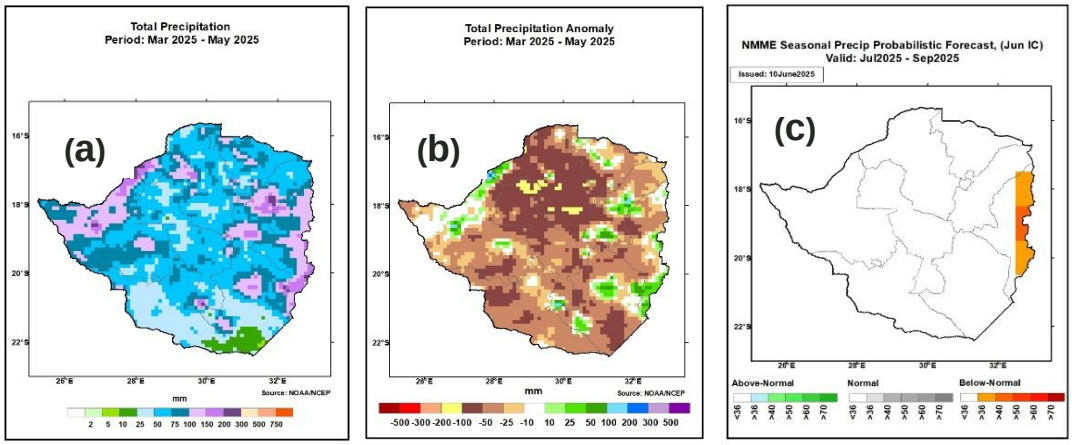


**Figure 3:** Satellite estimates of rainfall (RFE2) for the past 3 months (March 2025 – May 2025). (**a**) Total accumulation of precipitation and (**b**) rainfall anomaly. (**c**) Seasonal rainfall forecast for July2025 - September2025. **Source: NOAA/NCEP**

### Past 1 Month (May 2025):

- **Totals:** During May, 5 to 25mm total rainfall was recorded in many parts of northern, northeastern, central, and eastern Zimbabwe, with moderate amounts of rainfall (25 to 50mm) occurring in parts of central Mashonaland Central **(Fig. 4a**). The remaining parts of Zimbabwe remained climatologically dry **(Fig. 4a).**

- **Anomalies:** Most regions of Zimbabwe are climatologically dry during May. Rainfall was above average at few places in central Mashonaland Central, central Mashonaland West, and northern Manicaland provinces of Zimbabwe (**Fig. 4b**).

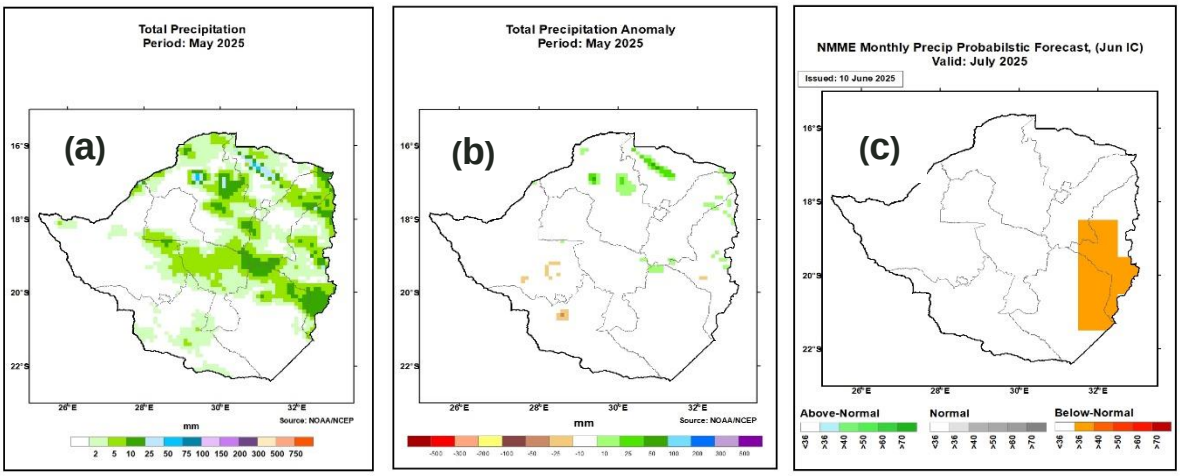


**Figure 4:** Satellite estimates of rainfall (RFE2) for May 2025. (**a**) Monthly total accumulation of rainfall and (**b**) monthly rainfall anomaly. (**c**) Monthly rainfall forecast for July2025. **Source: NOAA/NCEP**

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

- **Monthly:** Based on the NMME models, there is a slight tilt in the odds to favor below-average rainfall in parts of southeastern Zimbabwe during July 2025 (**Fig. 4c**).

- **Seasonal:** Based on the NMME models, there is a slight tilt in the odds to favor below-average rainfall in the far eastern Zimbabwe during July – September 2025 (**Fig. 3c**). **Table 1** gives the total climatological/average accumulation for 3-month forecast period and forecasted rainfall anomaly for the provinces of Zimbabwe.

**Table 1:** The total observed rainfall and anomalies from climatology for the past 1- and 3-months for the provinces of Zimbabwe. For seasonal forecast, the total climatological accumulation for the 3-month forecast period and forecasted rainfall anomalies are shown.

| Location | Past 3-Month | | Past 1-Month | | Seasonal Forecast | |
|---|---|---|---|---|---|---|
| | Total (mm) | Anomaly (mm) | Total (mm) | Anomaly (mm) | Climatology (mm) | Anomaly (mm) |
| **Mashonaland West** | 74 | -63 | 5 | 2 | 7 | -1 |
| **Mashonaland Central** | 74 | -28 | 7 | 4 | 10 | -1 |
| **Mashonaland East** | 96 | -19 | 5 | 1 | 19 | -2 |
| **Matabeleland North** | 93 | -19 | 1 | 2 | 5 | -1 |
| **Midlands** | 62 | -50 | 3 | 0 | 12 | -1 |
| **Manicaland** | 108 | -14 | 7 | 1 | 49 | -3 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Harare** | 98 | -37 | 3 | -2 | 13 | -1 |
| **Masvingo** | 64 | -27 | 3 | -2 | 31 | -1 |
| **Matabeleland South** | 49 | -36 | 2 | -2 | 14 | -1 |

## Temperature

### Past 3 months (March 2025 – May 2025):

- **Maximums:** Maximum temperatures were 1 to 2ºC above average in northern, western, southwestern, southern, and central-eastern Zimbabwe, with the largest anomalies of 2 to 3ºC occurring in eastern Mashonaland West and western Mashonaland Central (**Fig. 5a**, **Table 2**). Maximum temperatures were between 25 to 30ºC across Zimbabwe, with the warmest temperature of 30 to 35ºC recorded in the far northern and southern Zimbabwe.

- **Minimums:** Minimum temperatures were 1 to 2ºC above average in northern, western, central, and southeastern parts of Zimbabwe **(Fig. 5b)**. Minimum temperatures remained between 10 to 15ºC in central-eastern and southern Zimbabwe, and 15 to 20ºC in parts of northern, northwestern, western, and southeastern Zimbabwe.

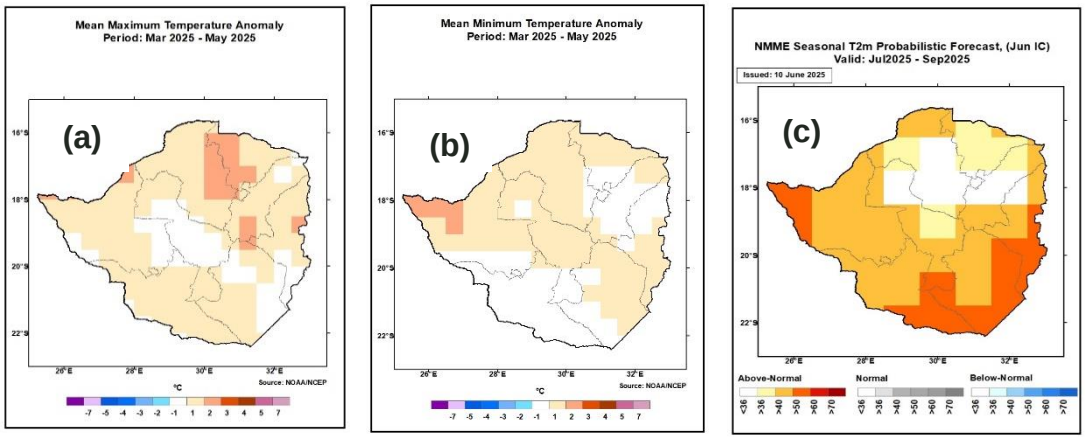


**Figure 5**: Spatial structure of maximum and minimum temperature anomalies for March 2025 – May 2025: **(a)** maximum temperature anomaly and **(b)** minimum temperatures anomaly. **(c)** Seasonal temperature forecast for July – September 2025. **Source: NOAA/NCEP**

### Past 1 Month (May 2025):

- **Maximums:** Maximum temperatures were 1 to 2ºC above average in parts of northern, western, central-eastern, and southern Zimbabwe, with the largest anomaly of up to 3ºC in some parts of eastern Mashonaland West and western Mashonaland Central (**Fig. 6a; Table 2)**. Maximum temperatures were between 20 to 30ºC across Zimbabwe.

- **Minimums:** Minimum temperatures were 1 to 2ºC above average in parts of northern and western Zimbabwe, and below average by 1 to 2ºC in the far southern Zimbabwe **(Fig. 6b)**. Minimum temperatures were between 10 to 20ºC in many parts of Zimbabwe, except in parts of central and southern Zimbabwe where minimum temperatures were between 5 to 10ºC.

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

- **Monthly:** Based on the NMME models, there is a slight tilt in the odds to favor above-average temperatures in parts of northwestern, eastern, southeastern, and some parts of southern Zimbabwe in July 2025 (**Fig. 6c**).

- **Seasonal:** Based on NMME forecasts, there is a slight to moderate tilt in the odds to favor above-average temperatures in western, southern, southeastern, and eastern, and some parts of northern Zimbabwe during July – September 2025 (**Fig. 5c, Table 2**).

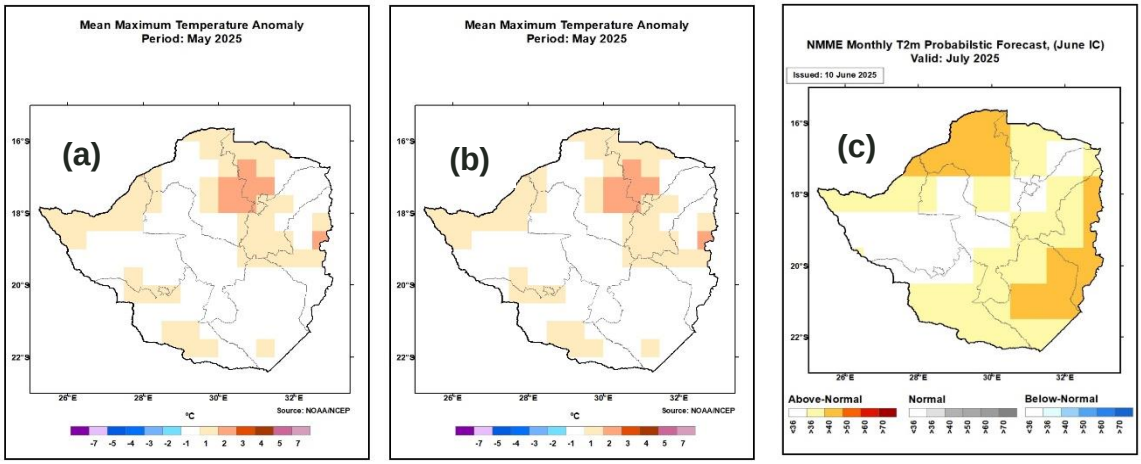


**Figure 6**: Spatial structure of average May 2025 **(a)** maximum temperature anomaly and **(b)** minimum temperatures anomaly. Monthly temperature forecast for July 2025 **(c)**. **Source: NOAA/NCEP**

**Table 2:** Average maximum temperatures and deviations from climatology for the past 1- and 3-months for the provinces of Zimbabwe. For seasonal forecast, the climatological/average temperatures values and forecasted temperature anomalies are provided.

| Location | Past 3-Month | | Past 1-Month | | Seasonal Forecast | |
|---|---|---|---|---|---|---|
| | Max/Min Temperature (ºC) | Max/Min Anomaly (ºC) | Max/Min Temperature (ºC) | Max/Min Anomaly (ºC) | Temperature Climatology (ºC) | Above/Below Average |
| **Mashonaland West** | 28.7/17.0 | 1.6/1.4 | 27.1/13.7 | 1.3/1.2 | 19.3 | 0.5 |
| **Mashonaland Central** | 28.6/16.8 | 1.8/1.2 | 27.2/13.3 | 1.6/0.9 | 17.9 | 0.4 |
| **Mashonaland East** | 26.5/14.8 | 1.4/0.9 | 24.8/11.3 | 1.0/0.2 | 17.0 | 0.3 |
| **Matabeleland North** | 28.5/16.4 | 1.3/1.4 | 26.7/12.3 | 1.0/0.7 | 19.5 | 0.6 |
| **Midlands** | 27.6/15.7 | 1.0/1.2 | 25.6/11.8 | 0.5/0.3 | 17.7 | 0.5 |
| **Manicaland** | 25.5/14.9 | 1.4/1.0 | 23.5/11.3 | 0.8/0.2 | 17.3 | 0.4 |
| **Harare** | 25.5/13.4 | 1.7/0.6 | 23.7/9.7 | 1.7/0.0 | 16.5 | 0.3 |
| **Masvingo** | 29.1/17.0 | 1.0/1.2 | 27.1/12.4 | 0.6/0.1 | 18.5 | 0.6 |
| **Matabeleland South** | 28.3/14.2 | 1.4/0.2 | 26.1/9.5 | 0.9/-0.7 | 18.2 | 0.5 |

## Flooding and Areas of Inundation

- Currently there is no flooding in Zimbabwe.
- Flooding is not expected in the next 3 weeks according to model forecasts for Zimbabwe.

## 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.

### Past 3 Months (March 2025 – May 2025):

- The SPI analysis for the past 3 months indicated drier than average conditions in western, and northwestern Zimbabwe (**Fig. 7a**). Wetter than average conditions existed in parts of northeastern, eastern, and southern Zimbabwe.

### Past 1 Month (May2025):

- The SPI analysis for May 2025 indicated wetter than average conditions in some parts of eastern Zimbabwe (**Fig. 7b**).

### Current/Forecast (01 June 2025 – 28 June 2025):

- The SPI forecast suggests wetter than average conditions in northeastern, eastern, central and southern parts of Zimbabwe (**Fig. 7c**).

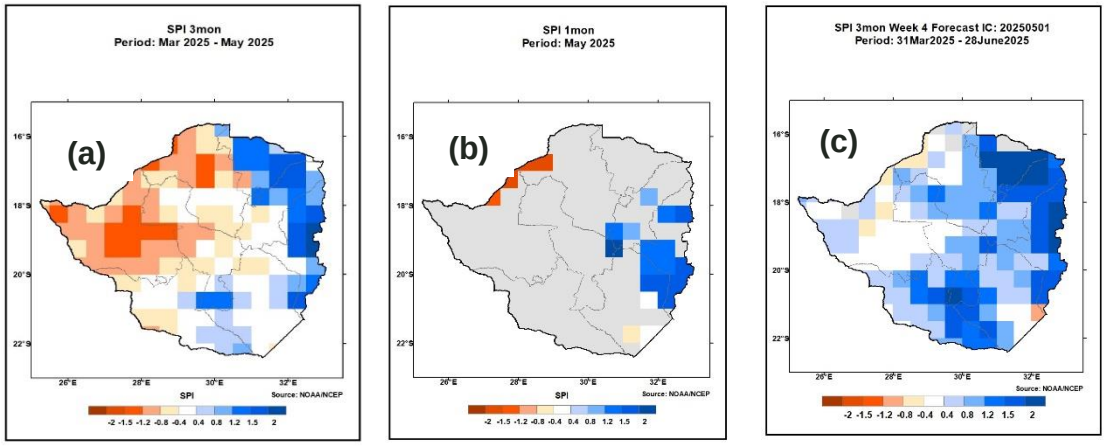


**Figure 7:** Spatial structure of the Standardized Precipitation Index (SPI) for **(a)** March 2025 –May 2025, **(b)** May 2025, and **(c)** Spatial structure of SPI constructed from observations for 31 March 2025 to 31 April 2025 and 4 weeks forecast ending on 28 June 2025. **Source: NOAA/NCEP**

## Normalized Difference Vegetation Index (NDVI)

NDVI is a measure of vegetation health, where high NDVI values are indicative of healthy, dense vegetation, and low NDVI values are indicative of less or no vegetation. Therefore, negative NDVI anomalies suggest deteriorated vegetation health relative to the long-term average.

**Past 1 Decadal period (21-31 May 2025):**

- From 21 – 31 May 2025, the observed NDVI is 105-140% of the long-term average in Matabeleland South, western and northern Masvingo, southern Midlands, eastern Matabeleland North, much of Mashonaland East, parts of northern, central and southern Manicaland, and southeastern and northeastern Mashonaland West, and 70 to 95% of the long-term average in parts of northern Midlands, central Mashonaland West and some parts of eastern Masvingo **(Fig. 8)**.

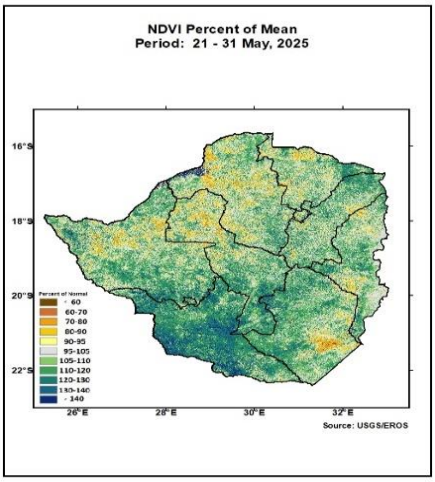


**Figure 8:** Spatial structure of the Normalized Difference Vegetation Index (NDVI) for period 21-31 May, 2025. **Source: USGS/EROS**

## Water Requirement Satisfaction Index (WRSI)

- During the third dekad (10-day period) of May 2025, maize crops conditions were "average to good" in parts of northern, central, western and eastern regions of Zimbabwe according to the WRSI analysis.

## GEOGLAM Crop Monitor

- In Zimbabwe, wheat planting for the 2025 season is underway with favourable conditions.

## Additional Resources

- https://www.cpc.ncep.noaa.gov/products/international/africa/africa_hazard.pdf
- https://www.cpc.ncep.noaa.gov/products/international/globalweatherhazard/Current.pdf
- https://www.cpc.ncep.noaa.gov/products/international/africa/expert/week1.jpg
- https://www.cpc.ncep.noaa.gov/products/international/africa/expert/week2.jpg
- https://www.cpc.ncep.noaa.gov/products/international/africa/expert/week34.jpg

# Annex

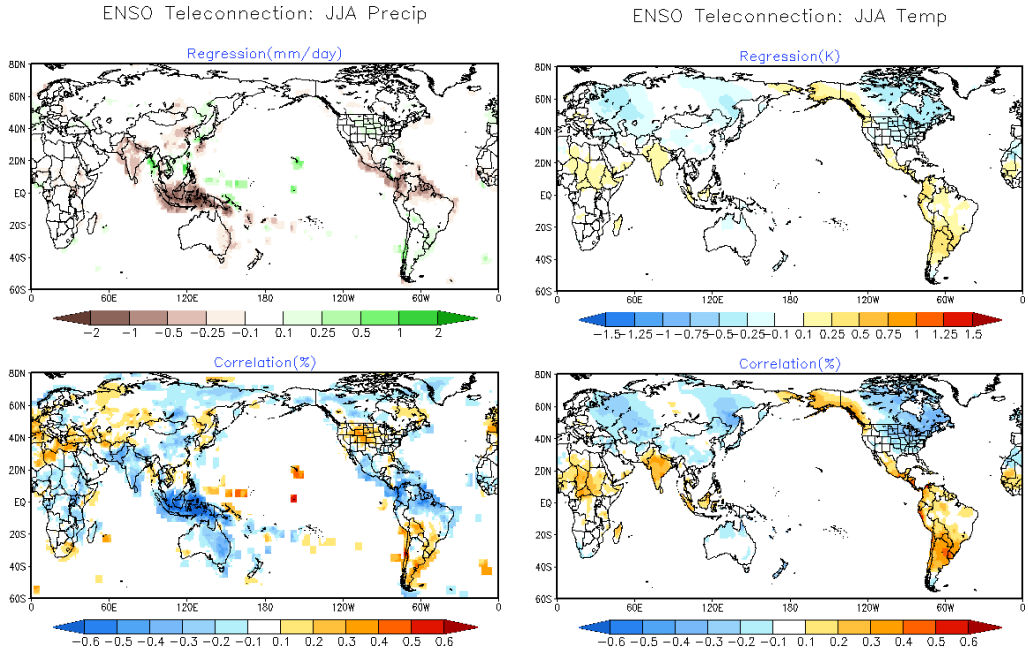


**Figure S1:** For three month season (June-July-August; JJA), precipitation and temperature anomalies are regressed onto the standardized Niño-3.4 index (upper panel). In the bottom panel, the correlation is calculated between Nino-3.4 and the anomalies.