



REPUBLIC OF KENYA

MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND FORESTRY STATE DEPARTMENT FOR ENVIRONMENT & CLIMATE CHANGE KENYA METEOROLOGICAL SERVICE AUTHORITY

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MONTHLY FORECAST FOR OCTOBER, OUTLOOK FOR THE NEXT THREE MONTHS (OCTOBER-NOVEMBER-DECEMBER) AND REVIEW OF SEPTEMBER 2026

1.0 SUMMARY

1.1 Monthly Forecast for October 2026

Above-average rainfall (with higher probabilities) is likely to occur in Kwale, Mombasa, Kilifi, Lamu, Mandera and parts of Taita Taveta, Tana River, Garissa and Wajir Counties.

Above-average rainfall is expected in Makueni, Kajiado, Machakos, Kitui, Nairobi, Kiambu, Murang'a, Kirinyaga, Embu, Tharaka-Nithi, Meru, Isiolo, Nyandarua, Nyeri and parts of Taita Taveta, Tana River, Garissa, Wajir, Marsabit, Laikipia, Nakuru and Narok Counties.

Near-average to above-average rainfall is expected in Baringo, Bomet, Bungoma, Busia, Elgeyo Marakwet, Homa Bay, Kakamega, Kericho, Kisii, Kisumu, Migori, Nandi, Nyamira, Samburu, Siaya, Trans Nzoia, Turkana, Uasin Gishu, Vihiga, West Pokot and parts of Narok, Nakuru and Laikipia Counties.

Mean temperatures are expected to be warmer than average throughout the country.

1.2 Outlook for October-November-December 2026

Above-average rainfall is expected in Baringo, Bomet, Bungoma, Busia, Elgeyo Marakwet, Embu, Garissa, Homa Bay, Isiolo, Kajiado, Kakamega, Kericho, Kiambu, Kilifi, Kirinyaga, Kisii, Kisumu, Kitui, Kwale, Laikipia, Lamu, Machakos, Makueni, Mandera, Meru, Migori, Mombasa, Murang'a, Nairobi, Nakuru, Nandi, Narok, Nyamira, Nyandarua, Nyeri, Siaya, Taita Taveta, Tana River, Tharaka-Nithi, Trans Nzoia, Uasin Gishu, Vihiga, Wajir and much of West Pokot, Samburu and Marsabit Counties. Near-average to above-average rainfall is likely to occur in Turkana and few parts of West Pokot, Samburu and Marsabit Counties.

Mean temperatures are predicted to be warmer than average during the season with higher probabilities over Kwale, Mombasa, Kilifi, Lamu and parts of Tana River, Taita Taveta and Garissa Counties.

1.3 Review of September 2026

Mainly sunny and dry weather conditions were observed in September 2026. Only a few counties such as Bungoma, Mombasa, Busia, Kisii and Kilifi received rainfall. Mean temperatures were warmer than average throughout the country.

2.0 RAINFALL FORECAST FOR OCTOBER 2026

2.1 October Rainfall Climatology

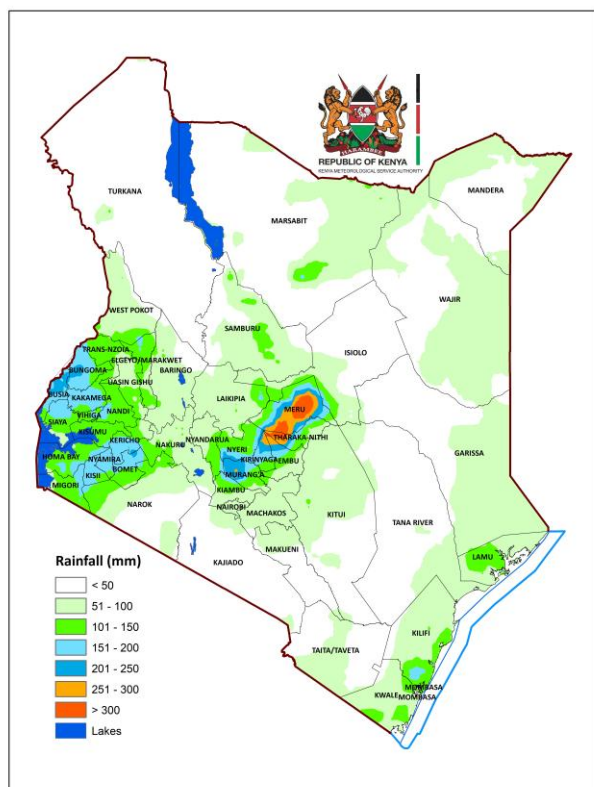


Figure 1: October rainfall climatology (1991-2020)

October marks the onset of the October-November-December "Short Rains" season over much of Kenya. The season begins as the Intertropical Convergence Zone (ITCZ) migrates southwards across East Africa, bringing increased moisture and convection. The month is particularly important to counties such as Meru, Tharaka-Nithi, Murang'a, Embu and Busia where more than 200mm of rainfall is received (Figure 1).

The duration and intensity of October rainfall is determined by the Indian Ocean Dipole (IOD), El Nino Southern Oscillation (ENSO) and intra-seasonal drivers such as the Madden-Julian Oscillation (MJO), tropical cyclones in the Indian Ocean and sub-tropical high-pressure systems.

2.2 Rainfall Forecast for October 2026

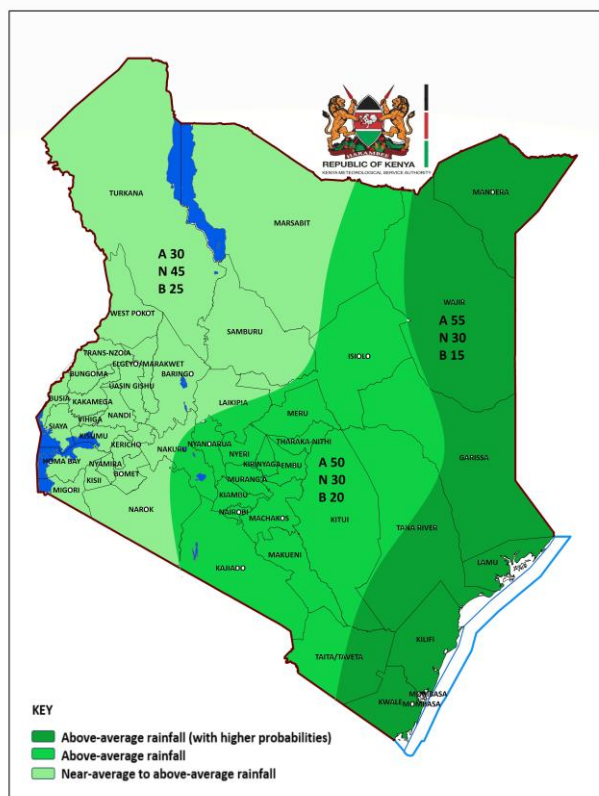


Figure 2: October 2026 rainfall forecast

Above-average rainfall (with higher probabilities) is likely to occur in Kwale, Mombasa, Kilifi, Lamu, Mandera and parts of Taita Taveta, Tana River, Garissa and Wajir Counties (Figure 2).

Above-average rainfall is expected in Makueni, Kajiado, Machakos, Kitui, Nairobi, Kiambu, Murang'a, Kirinyaga, Embu, Tharaka-Nithi, Meru, Isiolo, Nyandarua, Nyeri and parts of Taita Taveta, Tana River, Garissa, Wajir, Marsabit, Laikipia, Nakuru and Narok Counties.

Near-average to above-average rainfall is expected in Baringo, Bomet, Bungoma, Busia, Elgeyo Marakwet, Homa Bay, Kakamega, Kericho, Kisii, Kisumu, Migori, Nandi, Nyamira, Samburu, Siaya, Trans Nzoia, Turkana, Uasin Gishu, Vihiga, West Pokot and parts of Narok, Nakuru and Laikipia Counties.

Heavy rainfall events are expected in several parts of the country.

3.0 TEMPERATURE FORECAST FOR OCTOBER 2026

3.1 October Temperature Climatology

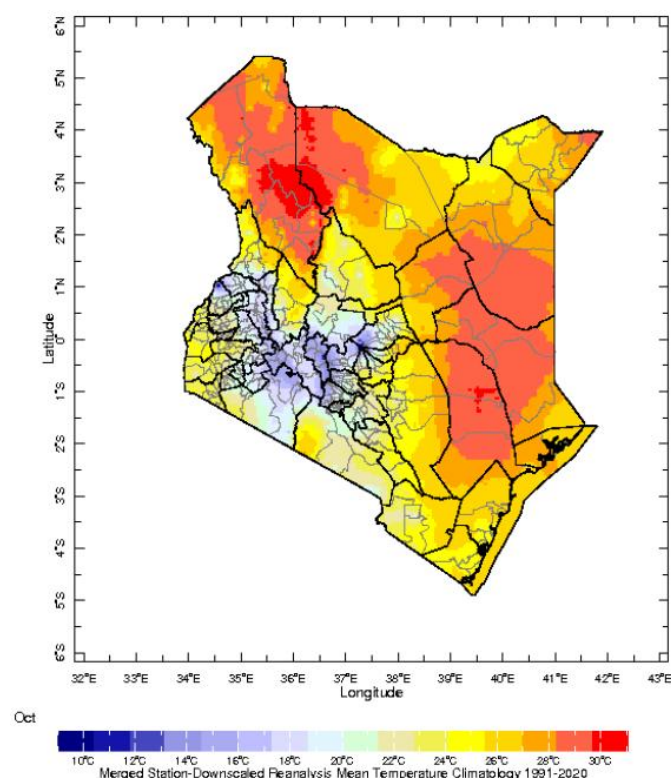


Figure 3: October mean temperature climatology (1991-2020)

October is generally a warm month that marks the transition from the cool June-July-August (JJA) season into the October-November-December "Short Rains" season. As the Intertropical Convergence Zone (ITCZ) moves southward across East Africa, temperatures rise across much of the country while humidity and cloud cover begin to increase.

Mean temperatures in October vary primarily with elevation (Figure 3). The coolest conditions occur in the highlands (15°C to 20°C), and the warmest conditions are observed in the arid and semi-arid lowlands (more than 28°C).

3.2 Detailed Regional Temperature Forecast for October 2026

Mean temperatures are expected to be warmer than average throughout the country. Predicted maximum and minimum temperature ranges for individual counties are shown in Table 1.

Table 1: Maximum and minimum temperature ranges

Counties	Maximum Temperature Range	Minimum Temperature Range
Nandi, Kakamega, Vihiga, Bungoma, Siaya, Busia, Baringo, Nakuru, Trans-Nzoia, Uasin Gishu, Elgeyo Marakwet, West Pokot, Kisii, Nyamira, Kericho, Bomet, Kisumu, Homabay, Migori and Narok Counties.	21°C to 32°C	08°C to 22°C
Turkana and Samburu Counties	23°C to 38°C	08°C to 28°C
Nyandarua, Laikipia, Nyeri, Kirinyaga, Murang'a, Kiambu, Meru, Embu, Tharaka-Nithi and Nairobi Counties	20°C to 32°C	04°C to 18°C
Marsabit, Mandera, Wajir, Garissa and Isiolo Counties	23°C to 39°C	16°C to 28°C
Machakos, Kitui, Makueni, Kajiado and Taita Taveta Counties as well as the inland parts of Tana River County	23°C to 36°C	10°C to 22°C
Mombasa, Kilifi, Lamu and Kwale Counties and the Tana Delta	27°C to 34°C	20°C to 26°C

4.0 POTENTIAL SECTORAL IMPACTS OF THE OCTOBER 2026 RAINS

4.1 Agriculture and Livestock

Above-average rainfall is expected to improve soil moisture, support land preparation and planting activities, enhance pasture regeneration, and improve water availability for livestock. However,

enhanced rainfall in some areas may also lead to waterlogging, delayed farm operations, increased crop diseases and difficulties in transporting agricultural produce.

4.2 Transport and Infrastructure

Enhanced rainfall may improve water availability for construction and support some infrastructure projects, but heavy rainfall may also disrupt road transport through flooding, waterlogging, and erosion of roads and bridges. Rural access roads are particularly vulnerable to becoming impassable after sustained rainfall. Urban areas may also experience traffic disruptions when drainage systems are overwhelmed.

4.3 Health

Increased stagnant water may create favourable breeding conditions for mosquitoes, potentially increasing the transmission of vector-borne diseases such as malaria in susceptible areas. Flooded or poorly drained settlements may also face higher risks of water-borne diseases where water quality and sanitation are compromised.

4.4 Disaster Management and Humanitarian Response

Enhanced rainfall is likely to increase the probability of weather-related hazards such as flash floods, riverine flooding, landslides, and localized infrastructural damage. Low-lying coastal zones, flood-prone river basins, urban centres with poor drainage, and steep highland areas are particularly vulnerable.

4.5 Water Resources Management and the Energy Sectors

Above-average rainfall is likely to increase river flows, replenish dams, water pans, and groundwater resources, and improve water availability for domestic, agricultural, and industrial use. In arid and semi-arid regions, the rains may contribute significantly to the recovery of water sources that are often stressed during the dry season. At the same time, heavy rainfall could increase runoff and cause localized flooding in some catchments, especially where drainage systems are inadequate.

5.0 OUTLOOK FOR OCTOBER-NOVEMBER-DECEMBER 2026

Above-average rainfall is expected in Baringo, Bomet, Bungoma, Busia, Elgeyo Marakwet, Embu, Garissa, Homa Bay, Isiolo, Kajiado, Kakamega, Kericho, Kiambu, Kilifi, Kirinyaga, Kisii, Kisumu, Kitui, Kwale, Laikipia, Lamu, Machakos, Makueni, Mandera, Meru, Migori, Mombasa, Murang'a, Nairobi, Nakuru, Nandi, Narok, Nyamira, Nyandarua, Nyeri, Siaya, Taita Taveta, Tana River, Tharaka-Nithi, Trans Nzoia, Uasin Gishu, Vihiga, Wajir and much of West Pokot, Samburu and Marsabit Counties.

Near-average to above-average rainfall is likely to occur in Turkana and few parts of West Pokot, Samburu and Marsabit Counties.

Mean temperatures are predicted to be warmer than average during the season with higher probabilities over Kwale, Mombasa, Kilifi, Lamu and parts of Tana River, Taita/Taveta and Garissa Counties.

5.1 Onset and Cessation Dates

The expected onset and cessation dates for the various counties are shown in Table 1.

Table 2: Onsets, Cessation and Distribution

Counties	Onset Dates	Cessation Dates	Distribution
Nandi, Kakamega, Vihiga, Bungoma, Siaya, Busia, Baringo, Nakuru, Trans-Nzoia, Uasin-Gishu, Elgeyo-Marakwet, West-Pokot, Kisii, Nyamira, Kericho, Bomet, Kisumu, Homabay, Migori and Narok	Continues from September	Continues into January	Fair to good
Nyandarua, Laikipia, Nyeri, Kirinyaga, Murang'a, Kiambu, Meru, Embu, Tharaka-Nithi and Nairobi	2 nd to 3 rd week of October	Continues into January	Fair to good
Machakos, Kitui, Makueni, Kajiado, Taita-Taveta and inland parts of Tana-River County	2 nd to 3 rd week of October	Continues into January	Fair to good
Mombasa, Kwale, Lamu, Kilifi and the Tana Delta	Continues from September	1 st to 2 nd week of December	Fair to good
Turkana and Samburu	3 rd to 4 th week of October	1 st week of December	Poor to Fair
Marsabit, Mandera, Wajir, Garissa and Isiolo	1 st to 2 nd week of October	1 st to 2 nd week of December	Fair to good

6.0 SEPTEMBER 2026 REVIEW (AS AT 29TH SEPTEMBER 2026)

6.1 Review for September 2026 Rainfall Performance

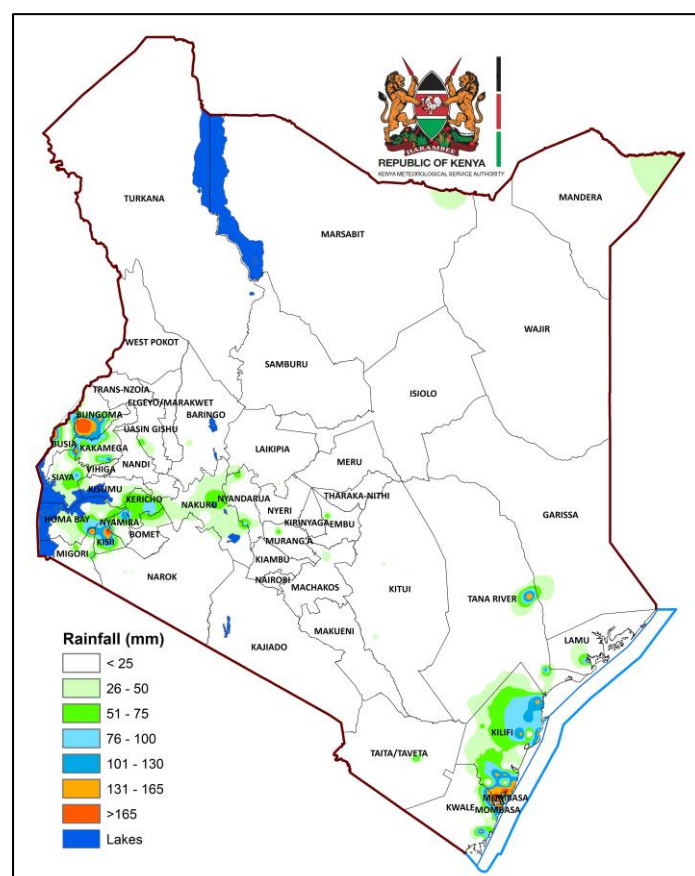


Figure 4: September 2026 rainfall totals.

Mainly sunny and dry weather conditions were observed in September 2026. Only a few counties such as Bungoma, Mombasa, Busia, Kisii and Kilifi received rainfall (Figure 4).

The automatic weather station (AWS) at Kibabii University in Bungoma County recorded the highest monthly rainfall total: 288.7mm.

Mtwapa Meteorological Station recorded the highest amount of rainfall within 24-hours: 77.1mm on 11th September 2026.

Figure 5 compares the total rainfall amounts recorded in September (Blue bars) to September LTMs (Red bars). From this figure several stations including Mombasa, Mtwapa, Msabaha, Malindi and Lamu surpassed their September LTMs. Conversely, Kakamega, Kitale, Eldoret, Kericho and Kisumu recorded rainfall that was below their September LTMs.

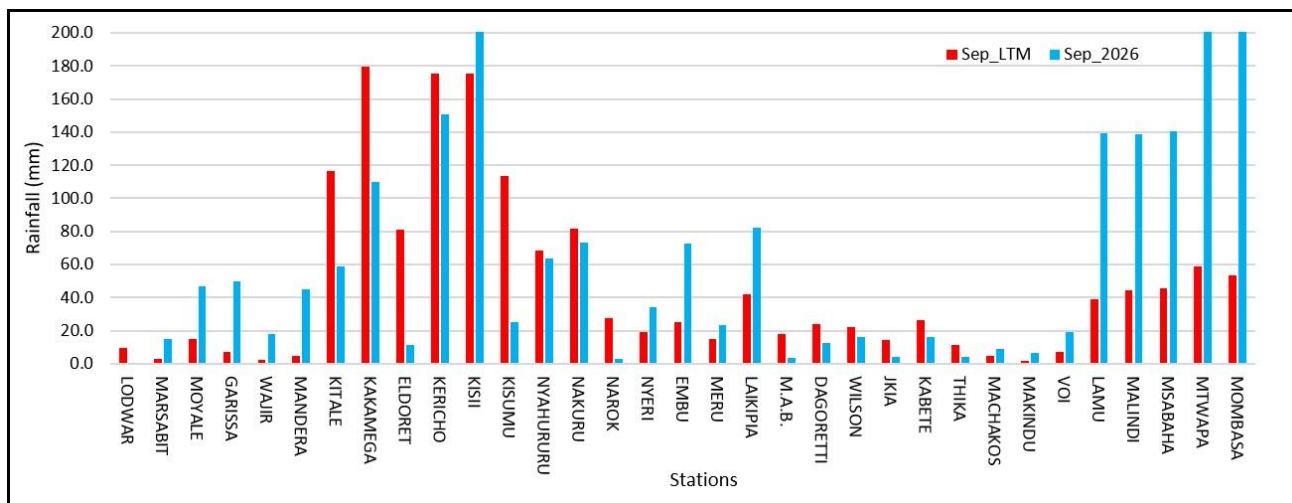


Figure 5: September 2026 rainfall totals against September LTMs

6.2 Review for September 2026 Temperatures

6.2.1 Maximum Temperature Review

Most parts of the country recorded warmer than average maximum (daytime) temperatures (Figure 6). The highest positive anomaly (3.4°C) was recorded at Kisii Meteorological Station. Mandera Meteorological Station recorded the highest daily maximum temperature: 38.5°C on 11th September 2026.

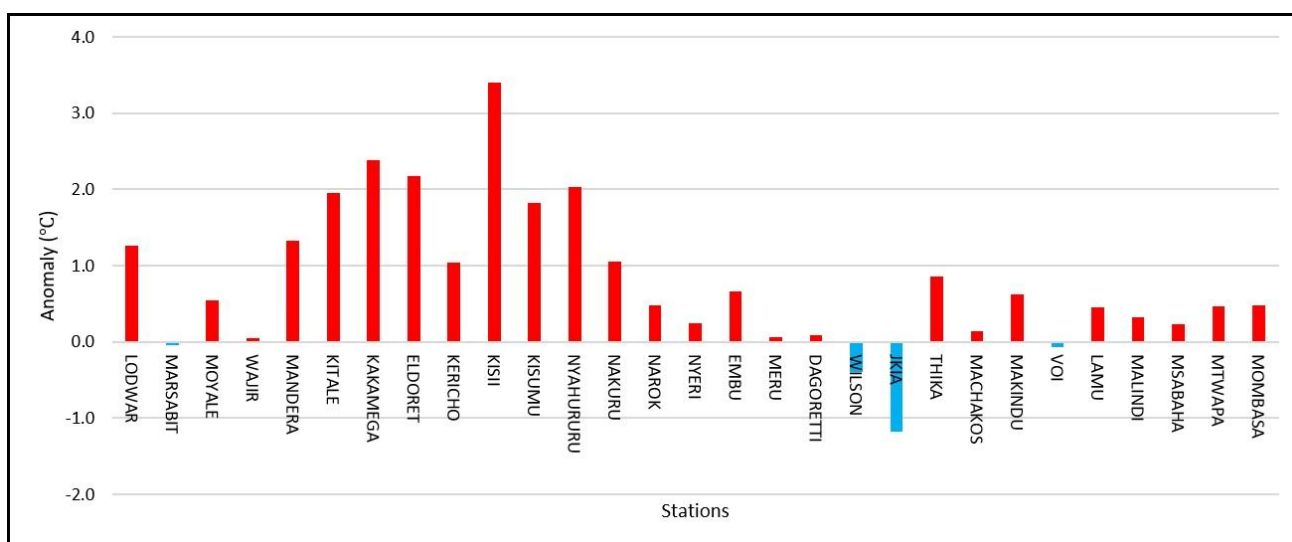


Figure 6: September 2026 maximum temperature anomalies

6.2.2 Minimum Temperature Review

Minimum (night-time) temperatures were warmer than average across the country (Figure 7). No station recorded a negative minimum temperature anomaly. Nyahururu Meteorological Station recorded the lowest daily minimum temperature: 4.4°C on 1st and 20th September 2026.

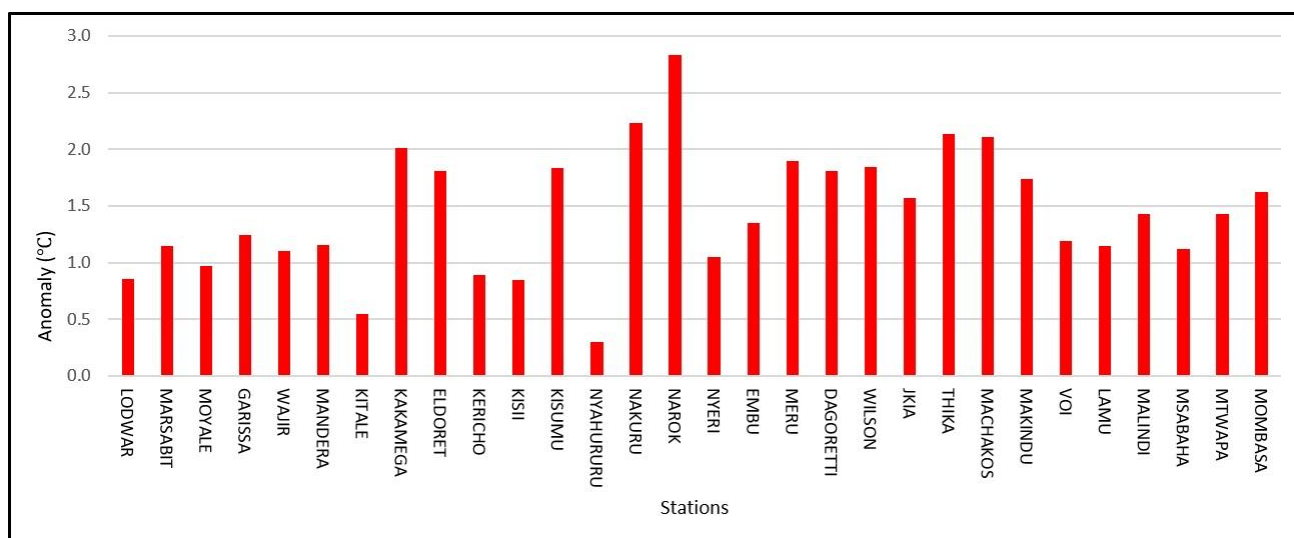


Figure 7: September 2026 minimum temperature anomalies

6.2.3 Mean Temperature Review

Mean temperatures were warmer than average throughout the country. Kakamega Meteorological Station recorded the highest mean temperature anomaly: 2.2°C. (Figure 8).

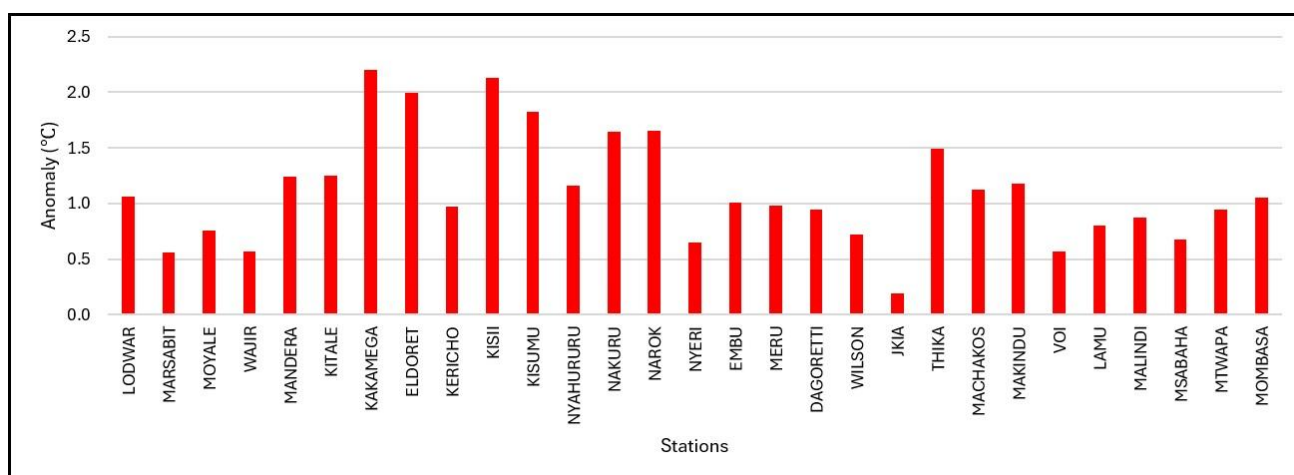


Figure 8: September 2026 mean temperature anomalies

N.B: This outlook should be used together with the 24-hour, 5-day, 7-day and special forecasts as well as regular updates/advisories issued by this Authority. County specific weekly and monthly forecasts are available from the offices of respective County Directors of Meteorological Services.

Edward M. Muriuki

Ag. DIRECTOR GENERAL, KENYA METEOROLOGICAL SERVICE AUTHORITY

APPENDIX I: INTERPRETATION OF TERMS USED

Term	Rainfall Amount (24 hrs.)	Description
Below normal/average	< 75% of the LTM	Depressed rainfall.
Normal/average	75% to 125% of the LTM	Near average rainfall.
Above normal/average	>125% of the LTM	Enhanced rainfall.
LTM		Long term mean

Term	Rainfall Amount (24 hrs.)	Description
Light	< 5 mm	Gentle rain, drizzle.
Moderate	5–20 mm	Steady, noticeable rain.
Heavy	21–50 mm	Intense rain, possible thunder.
Very Heavy	> 50 mm	Prolonged rain, high intensity.

Term	Area Affected	Description
Few places	< 33%	Rain in a small portion of the region.
Several places	33% to 66%	Rain in multiple but not most parts of the region.
Most places	> 66%	Rain in nearly all parts of the region.

Term	Area Affected	Description
Isolated	Less than 25%	Very few areas affected.
Scattered	25–50%	Several, but not most, areas affected.
Numerous	51–70%	Many areas affected.
Widespread	Over 70%	Almost all areas affected.

Term	Time Coverage (%)	Meaning
Occasional	Less than 25%	Happens rarely or a few times.
Intermittent	25% – 50%	Starts and stops, comes and goes.
Frequent	51% – 75%	Occurs regularly.
Very Frequent / Common	More than 75%	Happens almost all the time.

Term	Probability of Occurrence	Description
Possible	10–30%	There is low confidence.
Chance of/ May	31–50%	There is moderate confidence.
Likely	51–75%	The event is more probable than not.
Expected	76–90%	There is high confidence.
Very Likely	91–99%	There is very high confidence. Almost certain.
Certain	100%	The event is guaranteed to occur.