REPUBLIC OF TÜRKİYE
MINISTRY OF ENVIRONMENT, URBANIZATION AND CLIMATE CHANGE
Turkish State Meteorological Service



State of the Climate in October 2026



Climate and Agricultural Meteorology Department
Research Department

2026

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PREFACE



The Turkish State Meteorological Service (TSMS), under the Ministry of Environment, Urbanization, and Climate Change, prepares monthly, seasonal, and annual climate analyses consisting of temperature and precipitation assessments in order to inform the public and raise awareness regarding climate conditions.

Climate is a key environmental factor that directly affects a wide range of sectors, particularly urban development, agriculture, water resources management, energy production, and transportation. Therefore, continuous monitoring and analysis of climatic conditions play a crucial role in the long-term planning processes of these sectors.

Located within the Mediterranean Basin, Türkiye is among the regions most vulnerable to the adverse impacts of climate change, including heat waves, forest fires, droughts, floods, storms, and hail events. In recent years, an increase has been observed in both the frequency and intensity of extreme meteorological events associated with changing climate conditions.

This bulletin presents an assessment of temperature and precipitation observations recorded during the previous month and compares them with the climatological normals for the period 1991–2020. In addition, the report includes analyses of extreme temperature and precipitation events across Türkiye, regional climate evaluations, basin-based precipitation assessments, and the number of precipitation days.

All climate reports prepared by the Turkish State Meteorological Service are publicly available through the “Analyses” section of the official website at https://www.mgm.gov.tr.

We hope that these reports will contribute to increasing public awareness of weather and climate events, incorporating climate considerations into sectoral planning activities, supporting the development of climate-resilient cities, and assisting decision-makers in adaptation and risk-reduction efforts related to food security and disaster management.

Sincerely,

Volkan Mutlu COŞKUN

Director General
Turkish State Meteorological Service

1. Introduction

- ✓The October mean temperature based on the 1991–2020 normals is 15.6 °C, while the temperature in October 2026 was 15.3 °C.
- ✓The lowest temperature of −2.7 °C was measured in Erzurum, while the highest temperature of 33.8 °C was measured in Kozan.
- ✓In October 2026, mean temperatures were below the seasonal normals around Marmaris, Muğla, Akhisar, Datça, Korkuteli, Elmalı, Dalaman, Senirkent, Acıpayam, Mut, Kaş, Manavgat, Antakya, Finike, Silifke, Tefenni, Samandağ, Ergani and Çermik; above the seasonal normals around Yalova, Trabzon, Rize (Pazar), Bartın, Hopa, Iğdır and Ağrı; and around the seasonal normals in the rest of the country.
- ✓In October 2026, the mean temperature was 0.3 °C below the October average of the 1991–2020 normals.
- ✓ In October 2026, mean precipitation was 96.4 mm. The October normal is 49.4 mm (1991–2020), and October precipitation in the previous year was 53.5 mm. October precipitation increased by 95% compared with the normal and by 80% compared with October precipitation in the previous year.
- ✓ Across the region, precipitation in October decreased by more than 40% in northern Edirne, around Bartın, Samsun, Amasya, Yozgat, Tokat and Kayseri, and along the eastern Black Sea coast. In contrast, precipitation exceeding four times the normal was recorded in places around Çanakkale, Muğla, Denizli, Antalya, Isparta, Mersin, Adana, Kahramanmaraş, Adıyaman, Elazığ, Tunceli, Diyarbakır and Şanlıurfa.
- ✓ Among provinces, the highest precipitation was recorded in Kocaeli at 214.6 mm and the lowest in Yozgat at 26.2 mm. Mersin received more than five times its normal precipitation, while the largest decrease, 58%, was recorded in Trabzon. The highest October precipitation in the last 66 years was recorded in Mersin, Elazığ, Adıyaman, Adana, Tunceli, Bingöl, Diyarbakır, Muğla, Denizli and Kahramanmaraş; in the last 39 years in Şanlıurfa; in the last 38 years in Erzincan, Karaman and Malatya; in the last 30 years in Gaziantep; in the last 29 years in Hatay and Kilis; and in the last 20 years in Antalya, Burdur, Isparta, Mardin and Osmaniye. In Trabzon, October precipitation fell to its lowest level in the last 46 years.

2.Temperature

In October 2026, mean temperatures were below the seasonal normals around Marmaris, Muğla, Akhisar, Datça, Korkuteli, Elmalı, Dalaman, Senirkent, Acıpayam, Mut, Kaş, Manavgat, Antakya, Finike, Silifke, Tefenni, Samandağ, Ergani and Çermik; above the seasonal normals around Yalova, Trabzon, Rize (Pazar), Bartın, Hopa, Iğdır and Ağrı; and around the seasonal normals in the rest of the country.

The long-term mean temperature for October based on the 1991–2020 normals is 15.6 °C, while the mean temperature in October 2026 was 15.3 °C. Thus, the October 2026 temperature was 0.3 °C below the October average of the 1991–2020 normals.

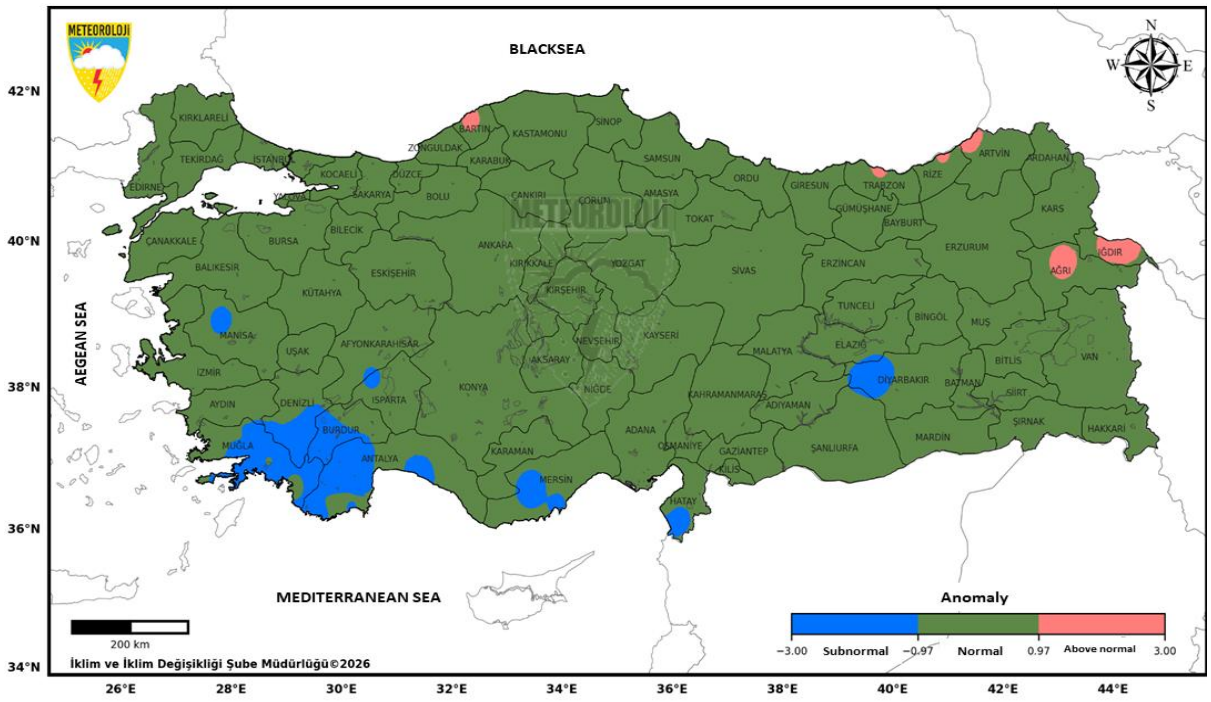


Figure 2.1 Spatial mean temperature anomalies for October 2026

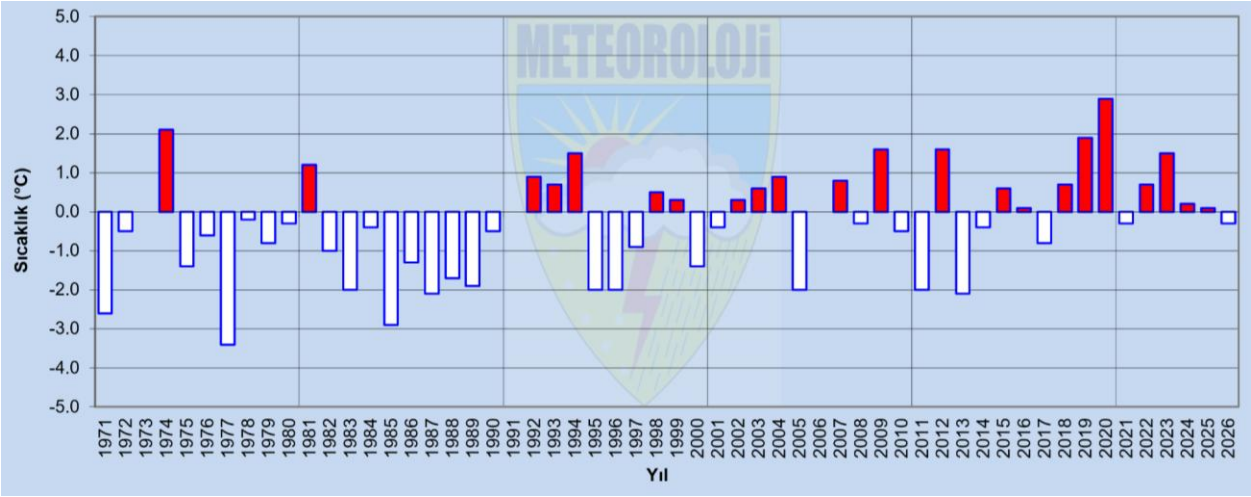


Figure 2.2 Mean temperature anomaly for October in Türkiye

With regard to mean temperature differences, negative temperature differences were observed in the eastern and western parts of Central Anatolia and in places in the southeast, while positive temperature differences were observed in the other regions of the country (Figure 2.3).

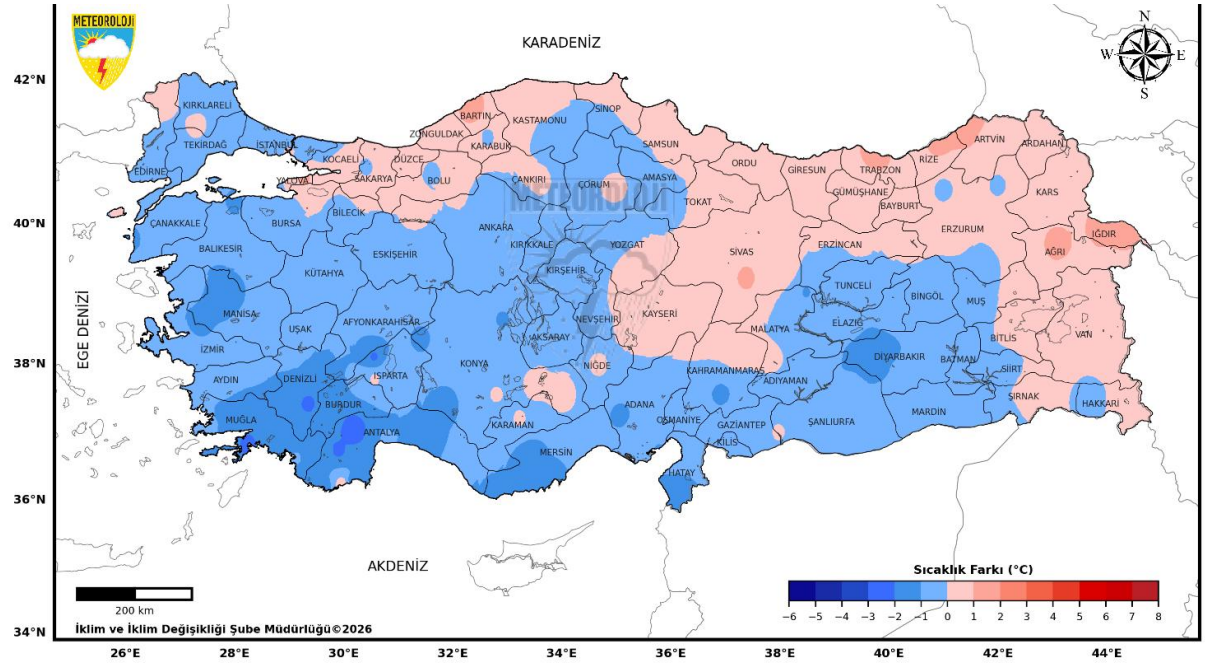


Figure 2.3 Mean temperature anomalies for Octobe 2026

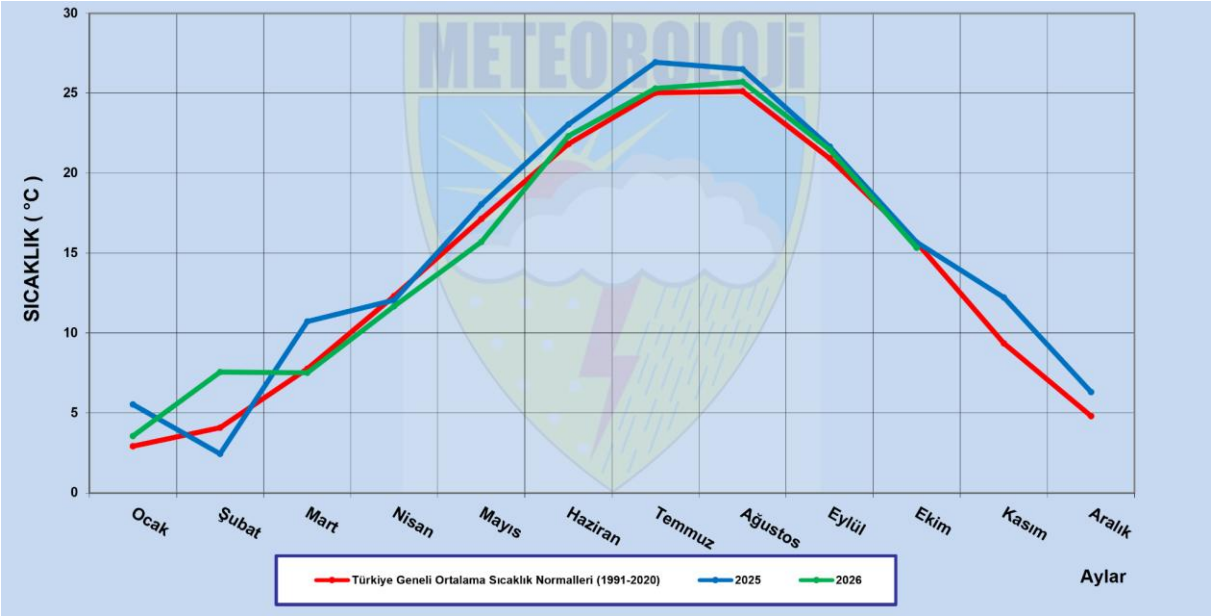


Figure 2.4 Comparison of October 2026 mean temperatures with the long-term average and the previous year

As shown in Figure 2.4, Türkiye's mean temperature in October 2026 was close to the 1991-2020 normal and broadly similar to the October 2025 value. The small differences among the three values indicate that October temperatures were near normal and showed little change compared with the previous year.

2.1. Regional Temperature

Marmara Region: Mean temperatures;

- were above the seasonal normals around Yalova and around the seasonal normals in the rest of the region.
- The long-term mean temperature for October in the region is 15.9 °C, while the mean in October 2026 was 15.7 °C.
- The lowest temperature in the region was 3.2 °C in Balıkesir, and the highest was 31.6 °C in Lüleburgaz.

Aegean Region: Mean temperatures;

- were below the seasonal normals around Marmaris, Muğla, Akhisar and Datça, and around the seasonal normals in the rest of the region.

- The long-term mean temperature for October in the region is 17.3 °C, while the mean in October 2026 was 16.4 °C.

- The lowest temperature in the region was 0.9 °C in Gediz, and the highest was 31.9 °C in Nazilli and Aydın.

Mediterranean Region: Mean temperatures;

- were below the seasonal normals around Korkuteli, Elmalı, Dalaman, Senirkent, Acıpayam, Mut, Kaş, Manavgat, Antakya, Finike, Silifke, Tefenni and Samandağ, and around the seasonal normals in the rest of the region.

- The long-term mean temperature for October in the region is 19.4 °C, while the mean in October 2026 was 18.3 °C.

- The lowest temperature in the region was 0.3 °C in Senirkent, and the highest was 33.8 °C in Kozan.

Central Anatolia Region: Mean temperatures;

- were around the seasonal normals throughout the region.

- The long-term mean temperature for October in the region is 12.7 °C, while the mean in October 2026 was 12.6 °C.

- The lowest temperature in the region was −1.9 °C in Boğazlıyan and Kangal, and the highest was 27.6 °C in Ereğli.

Black Sea Region: Mean temperatures;

- were above the seasonal normals around Trabzon, Rize (Pazar), Bartın and Hopa, and around the seasonal normals in the rest of the region.
- The long-term mean temperature for October in the region is 14.5 °C, while the mean in October 2026 was 14.9 °C.
- The lowest temperature in the region was 0.5 °C in Bayburt, and the highest was 33.3 °C in Bartın.

Eastern Anatolia Region: Mean temperatures;

- were below the seasonal normals around Ergani and above the seasonal normals around Iğdır and Ağrı, while they were around the seasonal normals in the rest of the region.
- The long-term mean temperature for October in the region is 12.0 °C, while the mean in October 2026 was 12.2 °C.
- The lowest temperature in the region was −2.7 °C in Erzurum, and the highest was 26.4 °C in Iğdır.

Southeastern Anatolia Region: Mean temperatures;

- were below the seasonal normals around Çermik and around the seasonal normals in the rest of the region.
- The long-term mean temperature for October is 19.5 °C, while the mean in October 2026 was 18.9 °C.
- The lowest temperature in the region was 6.9 °C in Batman, and the highest was 32.0 °C in Cizre.

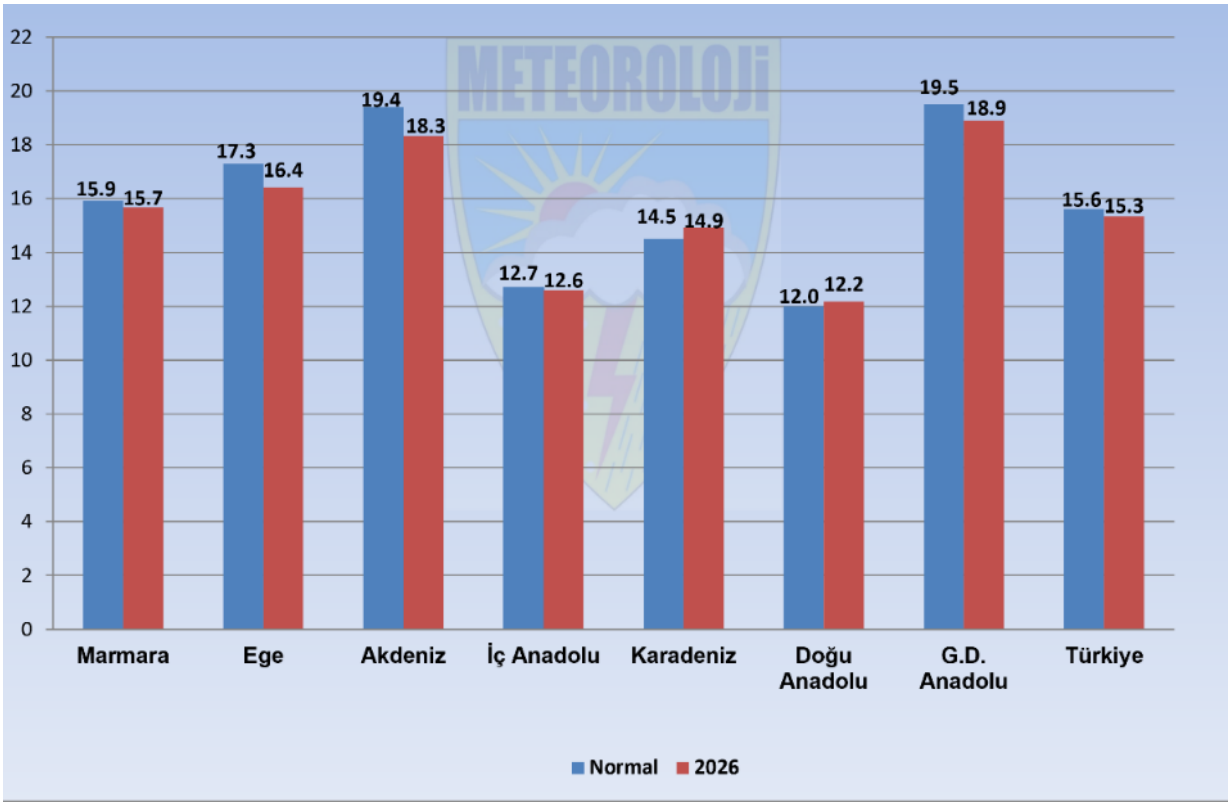


Figure 2. 5 Regional mean temperature differences in October 2026 (URL 1).

2.2. Extreme Temperature

No new extreme (maximum or minimum) temperature records were observed in October 2026.

3. Precipitation

Across Türkiye, precipitation in October 2026 increased by 95% compared with the normal (Figure 3.1, Table 3.1).

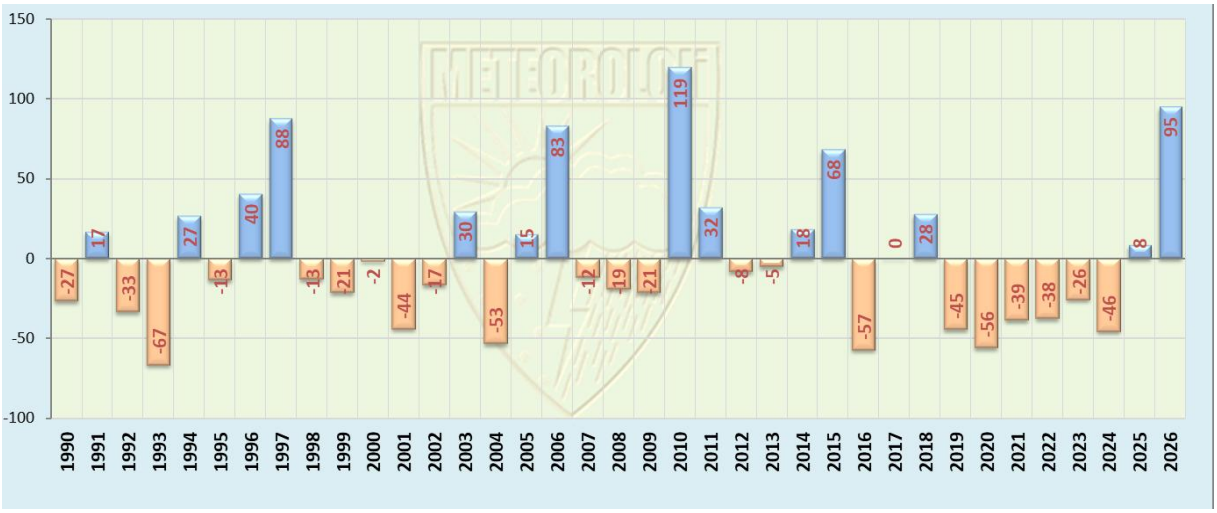


Figure 3.1. Departure of October 2026 precipitation totals from the long-term climatological normals.

Table 3.1. Nationwide precipitation in Türkiye in October 2026.

OCTOBER 2026 PRECIPITATION				
Türkiye-wide	**Precipitation (mm)**	**Normal, 1991–2020 (mm)**		**Change**
	96.4	**49.4**	**95**	**Increase**

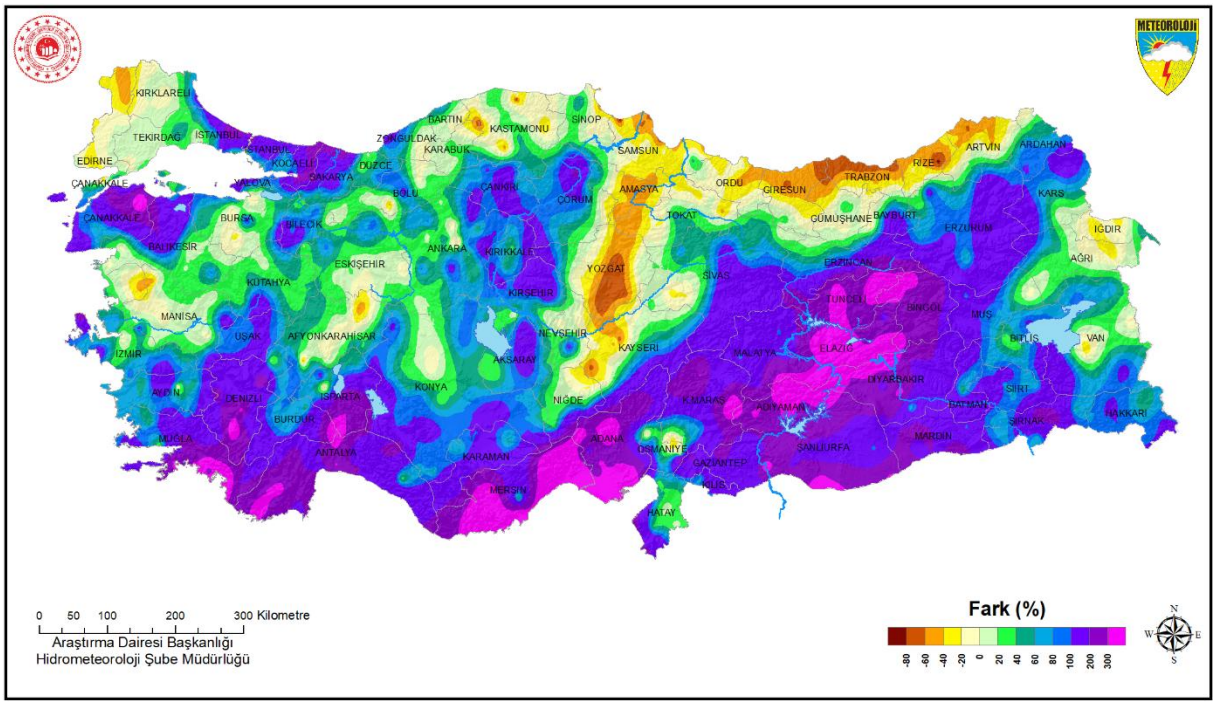


Figure 3.2. Deviation of October 2026 precipitation from the climatological normals.

In October 2026, mean precipitation across Türkiye was 96.4 mm. The October normal is 49.4 mm (1991–2020), and October precipitation in the previous year was 53.5 mm. October precipitation increased by 95% compared with the normal and by 80% compared with October precipitation in the previous year; Türkiye recorded its highest October precipitation in the last 16 years.

Precipitation decreased by more than 40% in northern Edirne, around Bartın, Samsun, Amasya, Yozgat, Tokat and Kayseri, and along the eastern Black Sea coast. In contrast, precipitation exceeding four times the normal was recorded in places around Çanakkale, Muğla, Denizli, Antalya, Isparta, Mersin, Adana, Kahramanmaraş, Adıyaman, Elazığ, Tunceli, Diyarbakır and Şanlıurfa.

Among provinces, the highest precipitation was recorded in Kocaeli at 214.6 mm and the lowest in Yozgat at 26.2 mm. During this period, Mersin received more than five times its normal precipitation, while the largest decrease, 58%, was recorded in Trabzon. The highest October precipitation in the last 66 years was recorded in Mersin, Elazığ, Adıyaman, Adana, Tunceli, Bingöl, Diyarbakır, Muğla, Denizli and Kahramanmaraş; in the last 39 years in Şanlıurfa; in the last 38 years in Erzincan, Karaman and Malatya; in the last 30 years in Gaziantep; in the last 29 years in Hatay and Kilis; and in the last 20 years in Antalya, Burdur,

Isparta, Mardin and Osmaniye. In Trabzon, October precipitation fell to its lowest level in the last 46 years.

3.1. Regional Precipitation

Across the regions, October precipitation was around normal in the Black Sea Region and above normal in the other regions. The highest precipitation in the last 66 years was recorded in the Mediterranean, Southeastern Anatolia and Eastern Anatolia regions; in the last 16 years in the Marmara Region; and in the last 15 years in the Aegean Region.

In the Marmara Region, the province with the highest precipitation was Kocaeli at 214.6 mm, and the province with the lowest precipitation was Edirne at 56.5 mm.

In the Aegean Region, the province with the highest precipitation was Muğla at 199.0 mm, and the province with the lowest precipitation was Afyonkarahisar at 54.3 mm

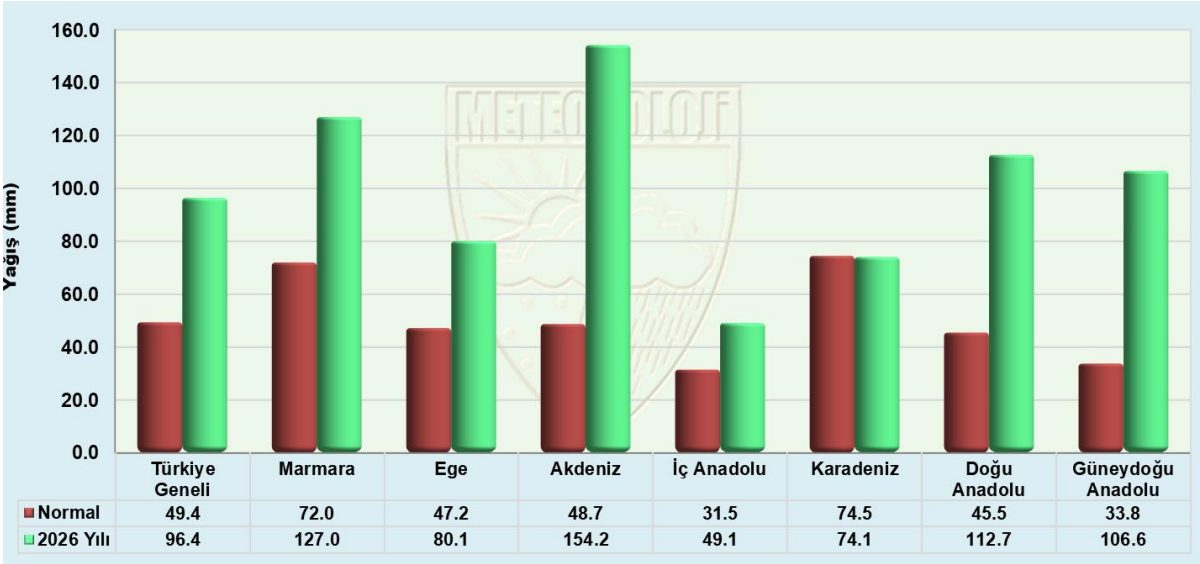
In the Mediterranean Region, the province with the highest precipitation was Antalya at 203.8 mm, and the province with the lowest precipitation was Burdur at 102.4 mm

In the Central Anatolia Region, the province with the highest precipitation was Karaman at 77.8 mm, and the province with the lowest precipitation was Yozgat at 26.2 mm

In the Black Sea Region, the province with the highest precipitation was Zonguldak at 164.1 mm, and the province with the lowest precipitation was Amasya at 29.7 mm

In the Eastern Anatolia Region, the province with the highest precipitation was Bingöl at 207.8 mm, and the province with the lowest precipitation was Iğdır at 32.2 mm

In the Southeastern Anatolia Region, the province with the highest precipitation was Adıyaman at 182.3 mm, and the province with the lowest precipitation was Mardin at 82.3 mm.



	Türkiye Geneli	Marmara	Ege	Akdeniz	İç Anadolu	Karadeniz	Doğu Anadolu	Güneydoğu Anadolu
Normal	49.4	72.0	47.2	48.7	31.5	74.5	45.5	33.8
2026 Yılı	96.4	127.0	80.1	154.2	49.1	74.1	112.7	106.6

Figure 3.3 Regional Precipitation Differences in August 2026

3.2. Number of Rainy Days

Across Türkiye, the mean number of precipitation days in October was 13.5 (1991–2020 normal: 7.9 days). The number of precipitation days was 20–25 around Erzincan, Tunceli, Bingöl, Muş, Bitlis and Hakkâri, and 5–10 around Edirne, Kırklareli, Balıkesir, İzmir, Manisa, Uşak, Denizli, Aydın, Ankara, Niğde, Kayseri and Yozgat

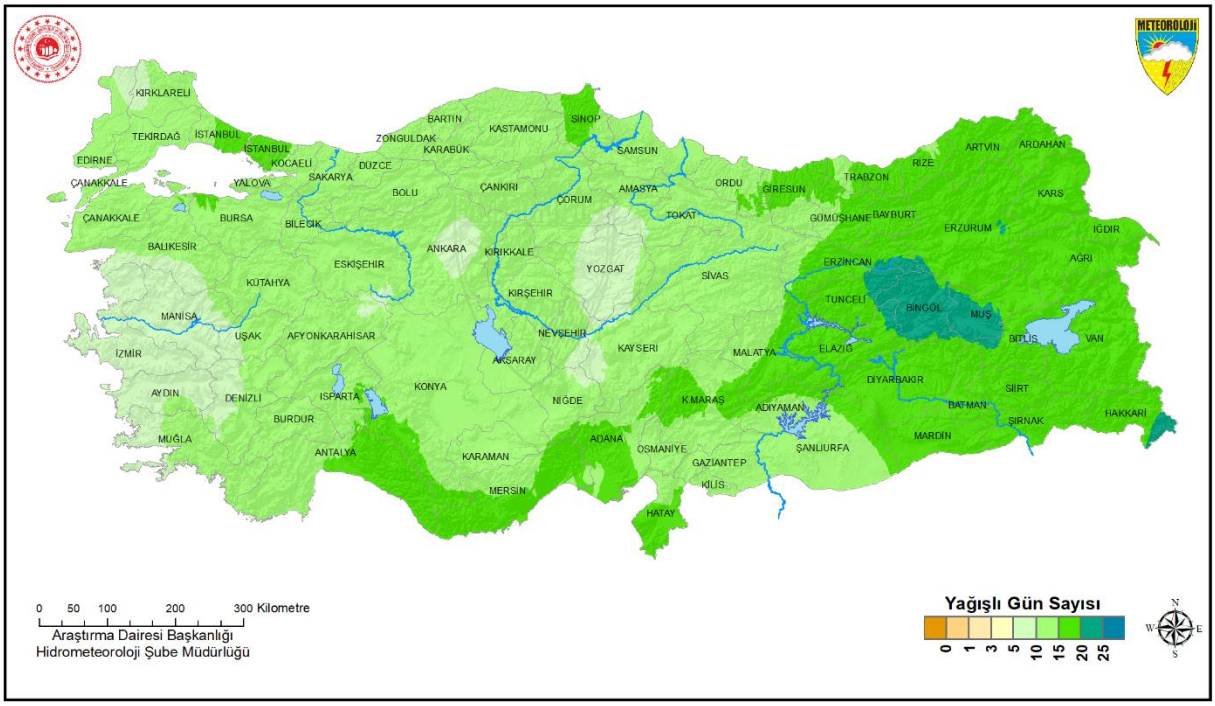


Figure 3.4 Number of rainy days in August 2026 (Url 2).

4. Extreme Meteorological Event

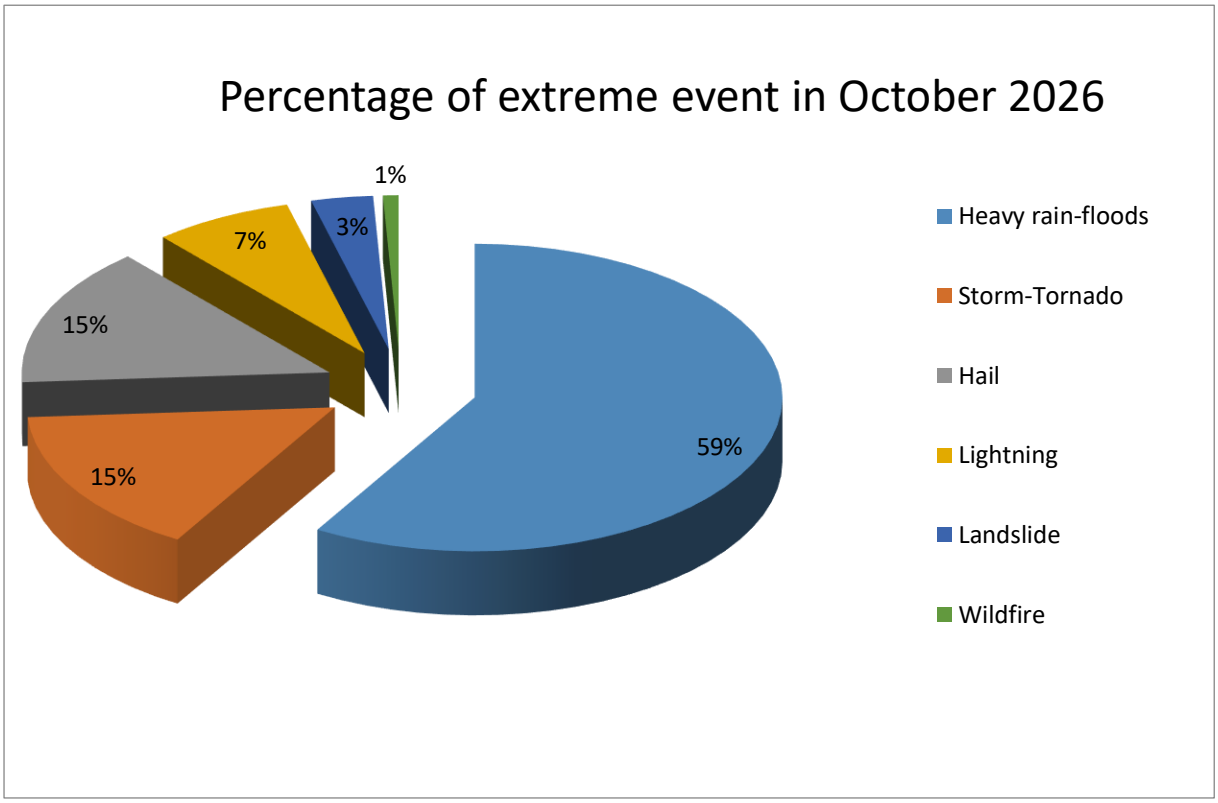


Figure 4.1. Percentage of extreme events in October 2026 (Url 3).

In October 2026, a total of 123 extreme weather events were recorded across Türkiye. Heavy rain and flood events were the most frequent, accounting for 59% of all events with 72 occurrences, followed by storms-tornadoes with 19 events (15%) and by hail with 18 events (%15). Lightning accounted for 7% of the total with 9 events. Landslide accounted for %3 of the total with 4 events, while wildfires were the least frequent extreme event category, with 1 occurrence representing 1% of the total. Overall, hydrometeorological events, particularly heavy rainfall and flooding, constituted the largest share of extreme events recorded during the month (Figure 4.1).

References

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2. URL 2, Turkish State Meteorological Service, precipitation analysis http://www.mgm.gov.tr/veridegerlendirme/yagis-raporu.aspx

3. URL 3, Turkish State Meteorological Service, Kardelen, meteorological extreme event database http://kardelen.mgm.gov.tr/BultenGenel/Klima/fevkGlnYeni.aspx

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