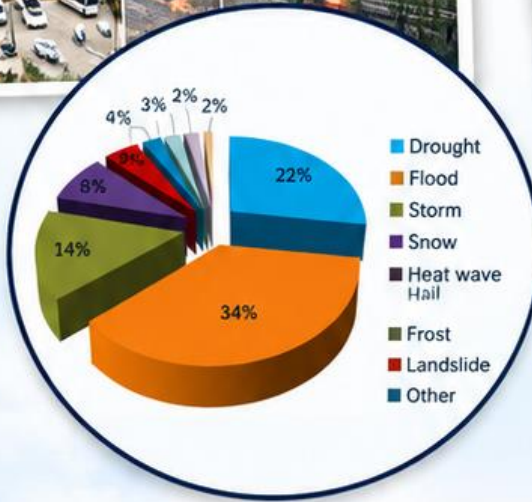
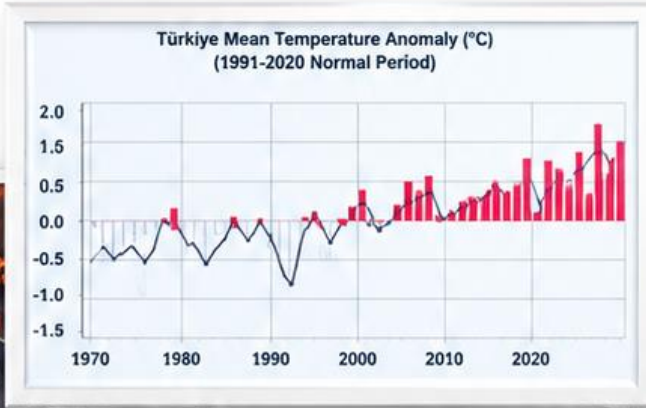




Early Climate Assessment of Türkiye in 2026



Climate and Agricultural Meteorology Department
Research Department

September 2026
Ankara

REPUBLIC OF TÜRKİYE
MINISTRY OF ENVIRONMENT, URBANIZATION AND CLIMATE CHANGE
TURKISH STATE METEOROLOGICAL SERVICE

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RESEARCH DEPARTMENT

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1. Introduction

The mean temperature in Türkiye during the first eight months of 2026 was 14.9 °C, which is 0.4 °C above the normal average of 14.5 °C based on the 1991-2020 normal period. This makes 2026 the fourteenth warmest year since 1971.

Monthly mean temperatures in March, April and May of 2026 were below the normal, while temperatures in other months were above normal. February had the highest mean temperature anomaly during the first eight months, reaching 3.5 °C above average.

In 2026, the mean temperatures for winter and summer above their seasonal normal temperatures, whereas the mean temperature for the spring season was below their normal seasonal temperatures. The winter mean temperature was 5.8 °C, which is 1.9 °C above the normal of 3.9 °C. The spring mean temperature was 11.6 °C, which is 0.8 °C below the normal of 12.4 °C and the summer, the mean temperature reached 24.4 °C, which is 0.4 °C above the normal of 24.0 °C.

In the first 8 months of 2026, the temperatures were as follows: The lowest minimum temperature recorded was -33.1 °C in Erzurum on January 3, 2026 and the highest maximum temperature recorded was 46.8 °C in Cizre on July 31, 2026. Out of the 220 stations used in the climate analysis studies, 8 have broke their own monthly maximum temperature records while 3 stations broke their own monthly minimum temperature records.

Türkiye 8 months (Jan. to August) mean areal precipitation in 2026 was 562.2 mm. This value is 54 % above the 1991-2020's normal (365.0 mm).

Precipitation anomalies across Türkiye indicate considerable spatial variability compared with long-term averages. Positive precipitation anomalies were observed across most parts of the country, particularly in the inner parts of the Aegean, Mediterranean, and Southeastern Anatolia regions. The highest positive anomalies, exceeding 100% in some areas, were recorded particularly around İzmir, Antalya, Adana, Hatay, Adıyaman, Diyarbakır, Şırnak, Hakkari and Van. In contrast, precipitation was below the long-term average in limited areas, mainly around northwestern, northern, and northeastern regions, particularly in Kırklareli, Tekirdağ, Istanbul, Kastamonu, and Artvin. Overall, the map indicates a predominance of above-normal precipitation across Türkiye, with the most pronounced positive anomalies concentrated in the southern and southeastern parts of the country.

Monthly total precipitation in 2026 was above normal except in June.

The number of extreme events reached 1.263 in the first 8 months of 2026 according to TSMS's Database. In the first eight months of 2026, the most hazardous extreme events were heavy rainfall and floods with 33%, storms with 20%, hail with 17%, landslide with 10%, heavy snow with 8%, and lightning strikes and avalanche with 4%.

2. Temperature

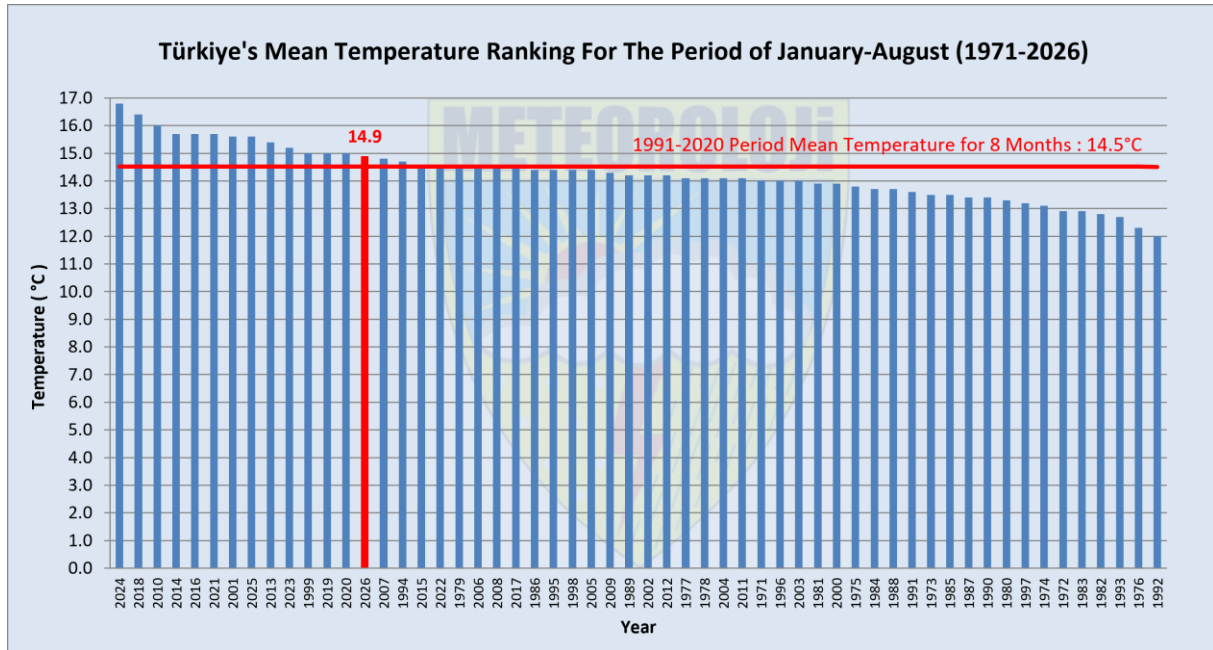


Figure 2. 1 Türkiye's January-August mean temperature ranking since 1971 to 2026.

The mean temperature was 14.9 °C in the first eight months of 2026 in Türkiye. This value is 0.4 °C above from 1991-2020 normal (14.5°C) which makes 2026 **the fourteenth warmest year** since 1971 (Fig.2.1).

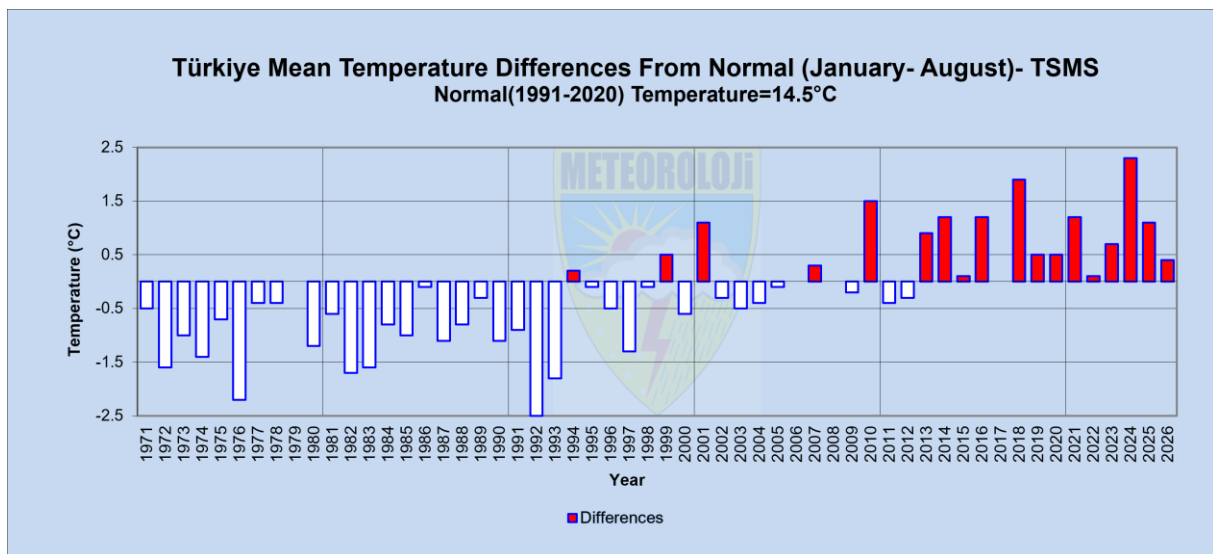


Figure 2. 2 Türkiye's January-August mean temperature differences from normal (URL 1)

Since 2005, there are consistent positive differences in Türkiye's mean temperatures except for the years 2009, 2011 and 2012. The warmest year was 2024 with 2.3 °C temperature difference since 1971 (Fig.2.2).

2.1 Monthly Temperature

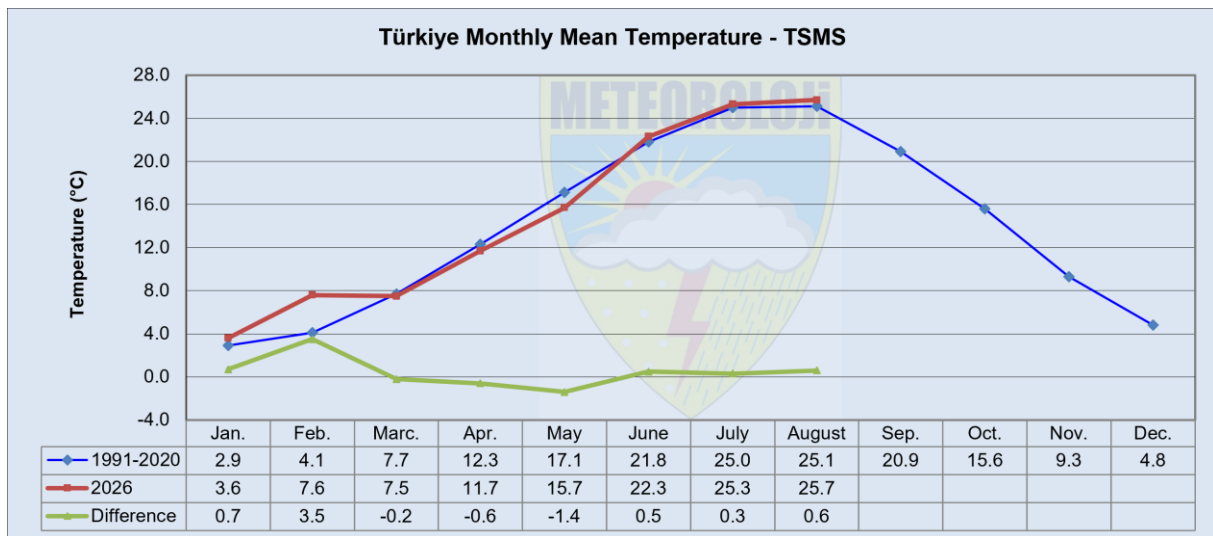


Figure 2. 3 Türkiye's monthly mean temperature difference in 2026 from their normal (URL 1)

The monthly mean temperatures of march (0.2 °C) april (0.6 °C) and may (1.4) of 2026 are below the normal temperatures (1991-2020); above the normal temperatures in other months. The mean temperature anomaly for the first 8-month of 2026 was the highest in February (3.5°C) (Fig.2.3).

2.2 Seasonal Temperature

The mean temperatures of the winter summer seasons of 2026 were above their seasonal normal temperatures (1991-2020), whereas the mean temperature for the spring seasons was below their normal seasonal temperatures. (Fig.2.4, Fig 2.5, Fig 2.6).

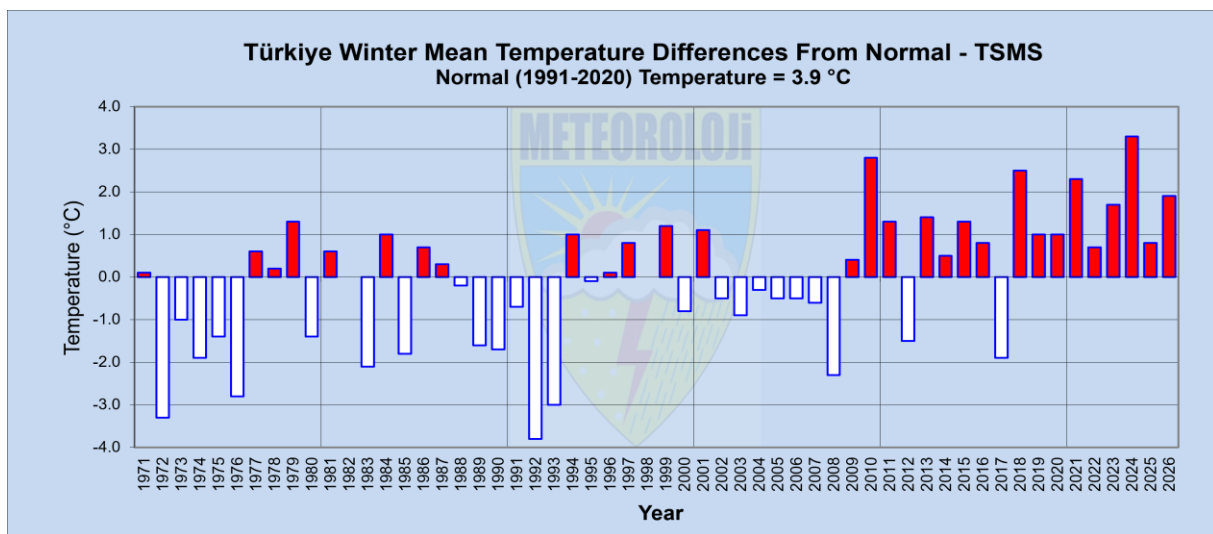


Figure 2. 4 Türkiye's winter mean temperature differences from normal (URL 1)

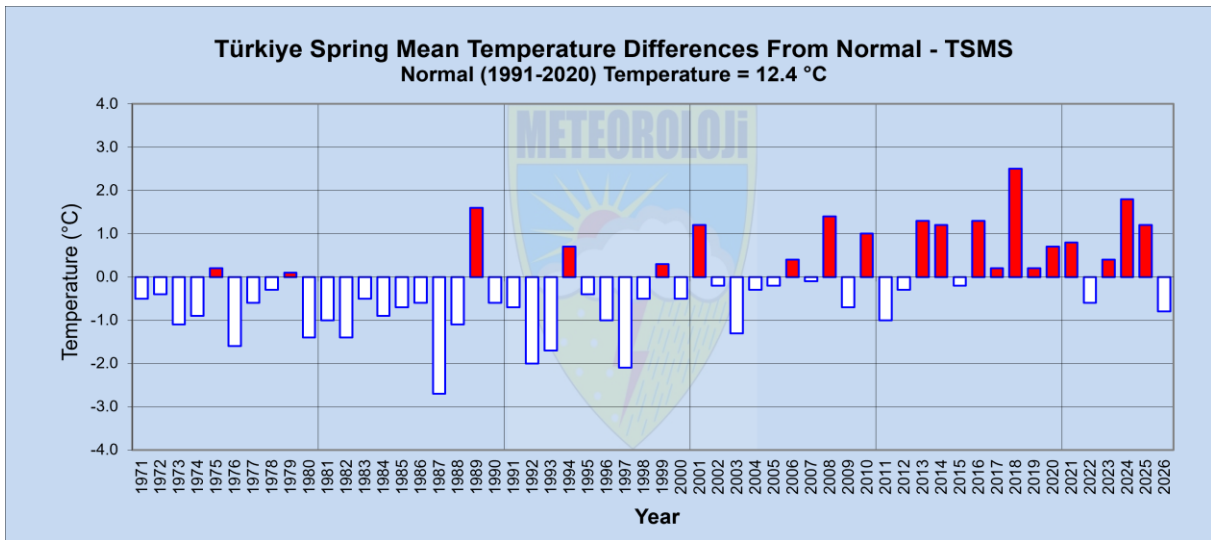


Figure 2.5 Türkiye's spring mean temperature differences from normal (URL 1)

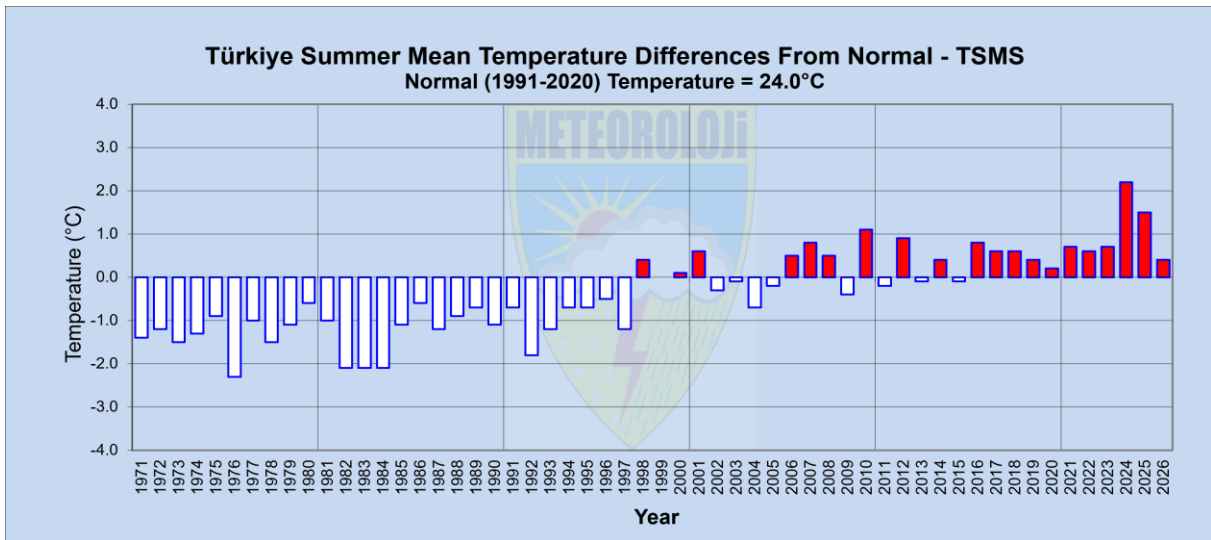


Figure 2.6 Türkiye's summer mean temperature differences from normal (URL 1)

In 2026, winter mean temperature was 5.8 °C, which is 1.9 °C above their normal (3.9 °C); the spring mean temperature was 11.6 °C, which is 0.8 °C below the normal of 12.4 °C and the summer mean temperature was 24.4 °C, which is 0.4 °C above their normal 24.0°C (Fig.2.4, Fig.2.5, Fig.2.6).

2.3. Extreme Temperature

In the first 8 months of 2026, the temperatures were as follows: The lowest minimum temperature recorded was -33.1 °C in Erzurum on January 3, 2026 and the highest maximum temperature recorded was 46.8 °C in Cizre on July 31, 2026. Out of the 220 stations used in the climate analysis studies, 8 have broke their own monthly maximum temperature records (Table 1), while 3 stations broke their own monthly minimum temperature records (Table 2).

Table 1. New extreme maximum temperature records on January-August in 2026.

Extreme Minimum Temperature (°C)					
Day	Month	Station	2026	Establishment-2026	Difference
7	OCAK	FLORYA	20.6	20.5	0.1
15	ŞUBAT	İSTANBUL	24.7	23.4	1.3
15	ŞUBAT	FLORYA	24.4	22.5	1.9
16	ŞUBAT	EREĞLİ	23.4	22.0	1.4
15	ŞUBAT	BARTIN	28.6	27.2	1.4
15	ŞUBAT	CİDE	26.0	25.3	0.7
16	ŞUBAT	İSPIR	18.3	17.0	1.3
17	ŞUBAT	ERZURUM	10.7	10.6	0.1

Table 2. New extreme minimum temperature records on January-August in 2026.

Extreme Minimum Temperature (°C)					
Day	Month	Station	2026	Establishment-2026	Difference
4	May	ANAMUR	8.2	8.6	-0.4
4	May	KAŞ	9.7	10.7	-1.0
1	June	BİTLİS	4.6	5.2	-0.6

3. Precipitation

Türkiye 8 months (Jan. to August) mean areal precipitation in 2026 was 562.2 mm. This value is 54 % above the 1991-2020's normal (365.0 mm) (Figure 3.1).

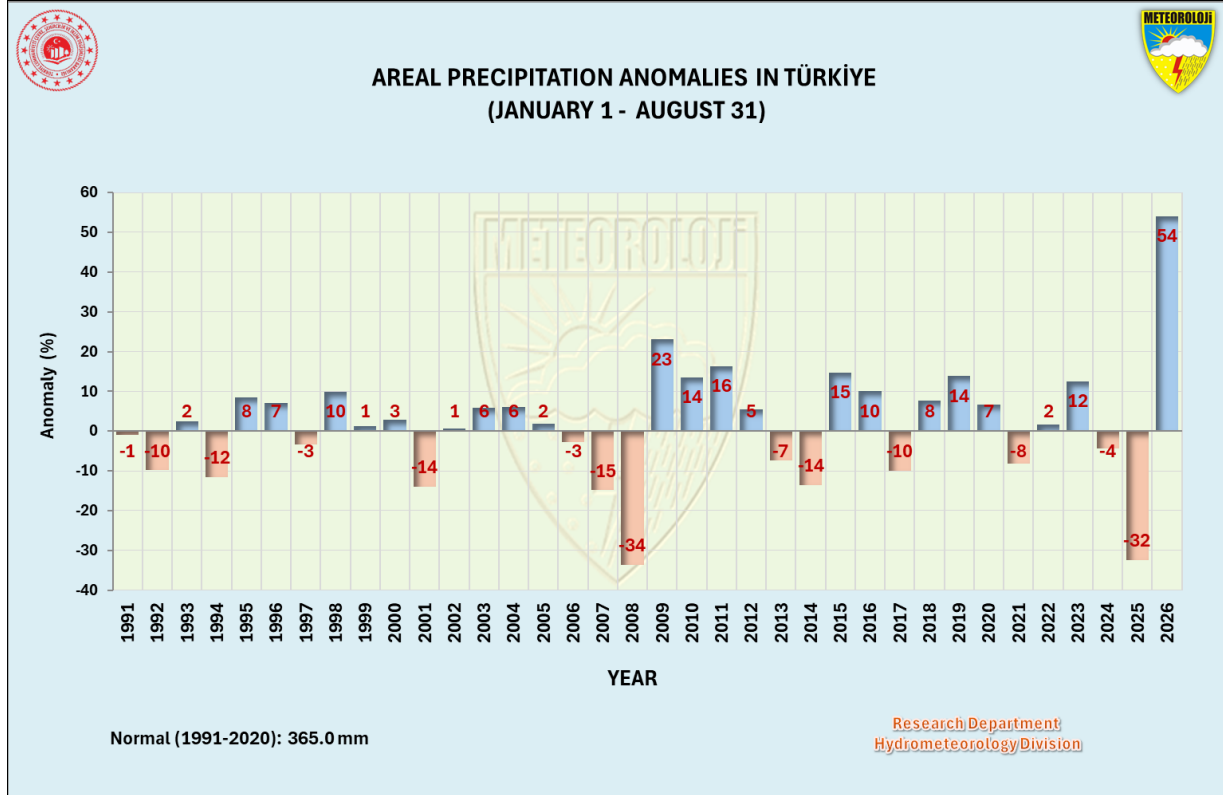


Figure 3. 1 Annual areal precipitation anomaly in Türkiye (URL 2)

2.3 Monthly Precipitation

Monthly total precipitation in 2026 was above normal except in June (Figure 3.3).

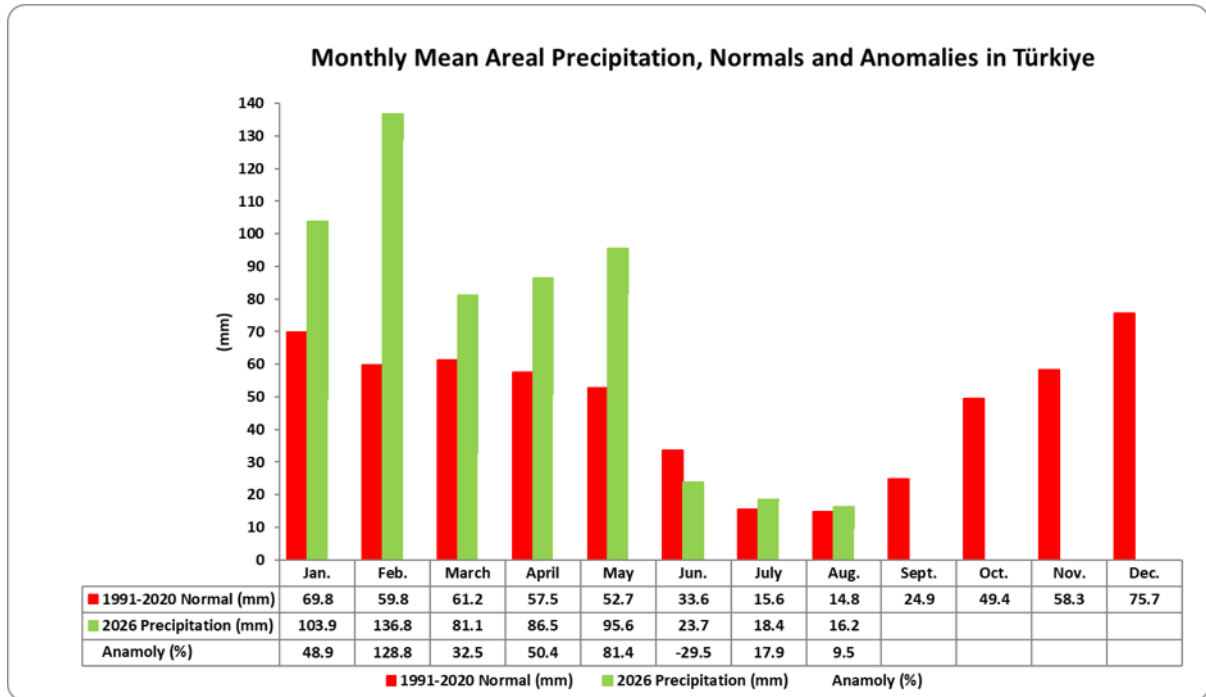


Figure 3. 3 Monthly areal rainfall anomaly in Türkiye in 2026 (URL 2)

3.2. Meteorological Drought Analysis

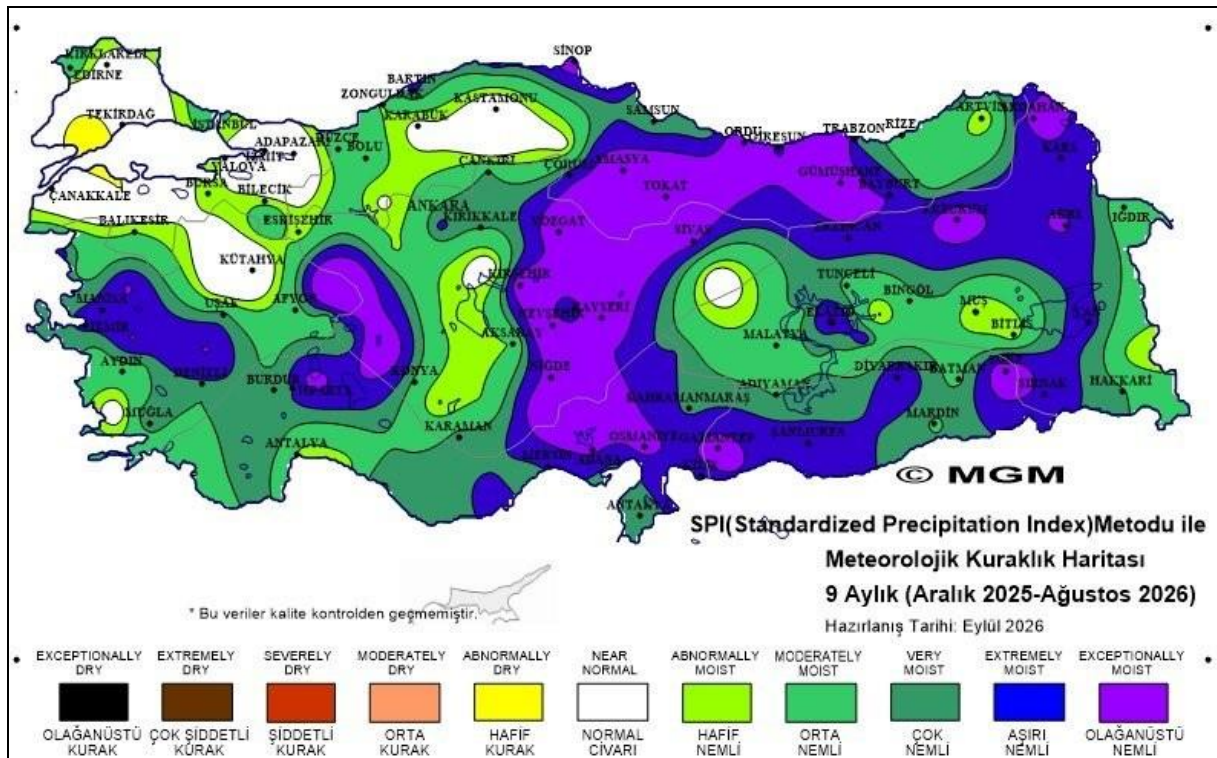


Figure 3. 4 Standardized Precipitation Index of Türkiye (URL 3)

According to the 9-month meteorological drought map prepared according to the Standard Precipitation Index Method, most of the Türkiye was moist, ranging from moderate to exceptional.

3.3. Seasonal Precipitation

Precipitation in 2026 was 47% higher than normal in winter and 54% higher than normal in spring. Besides, summer precipitation decreased by 9% below its normal (Figure 3.5).

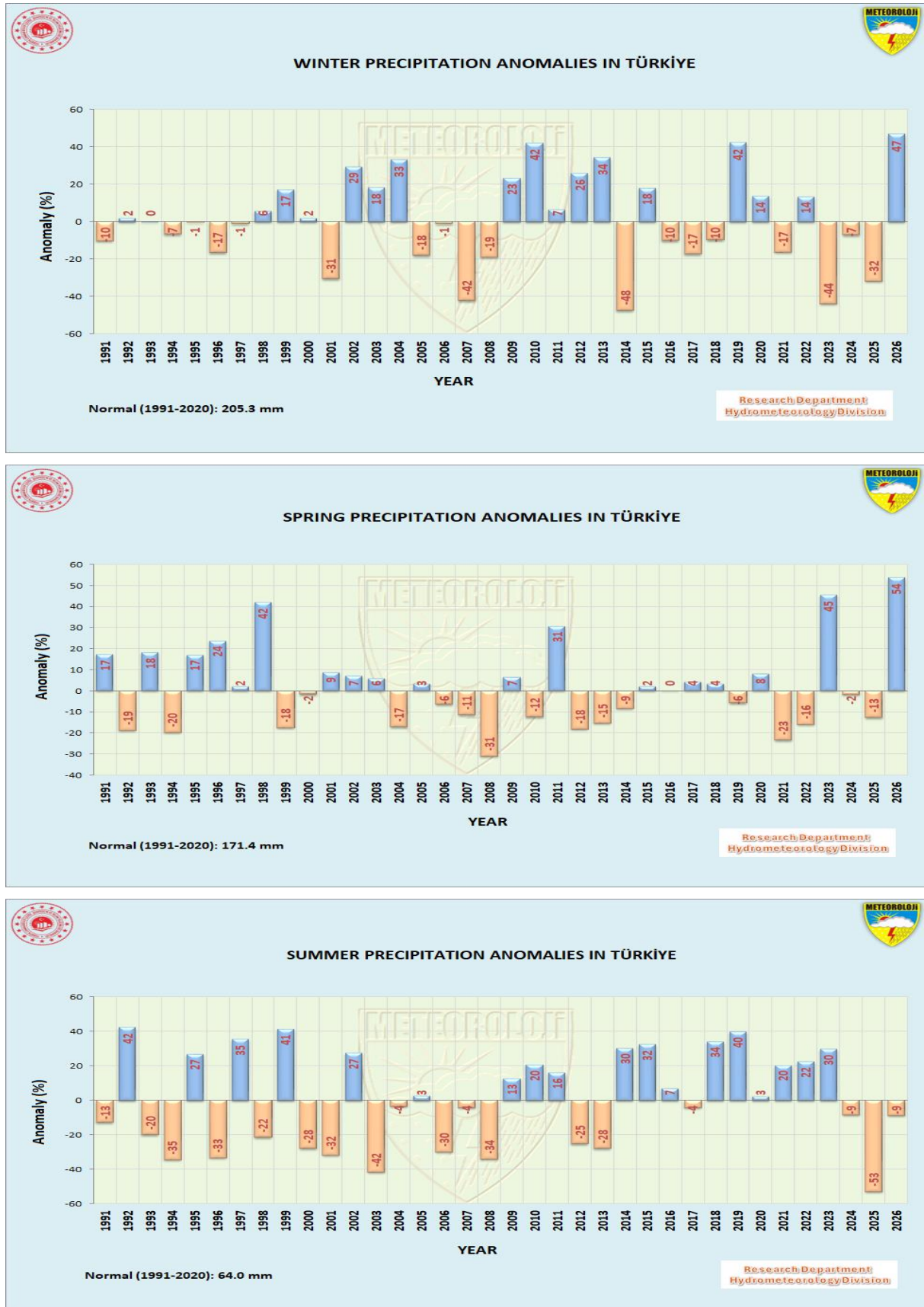


Figure 3.5. Seasonal precipitation anomalies (winter:top, spring:middle, and summer:bottom)

4. Extreme Meteorological Events

The number of extreme events reached 1.263 in the first 8 months of 2026 according to TSMS's Database (Fig. 4.1).

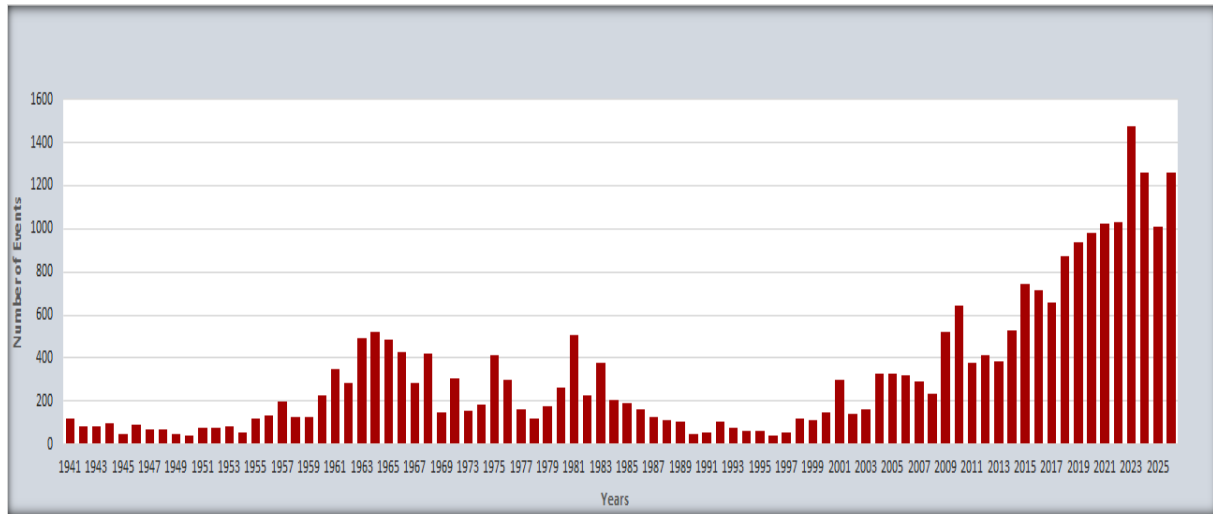


Figure 4. 1 Annual number of extreme events in Türkiye (1940-2026)

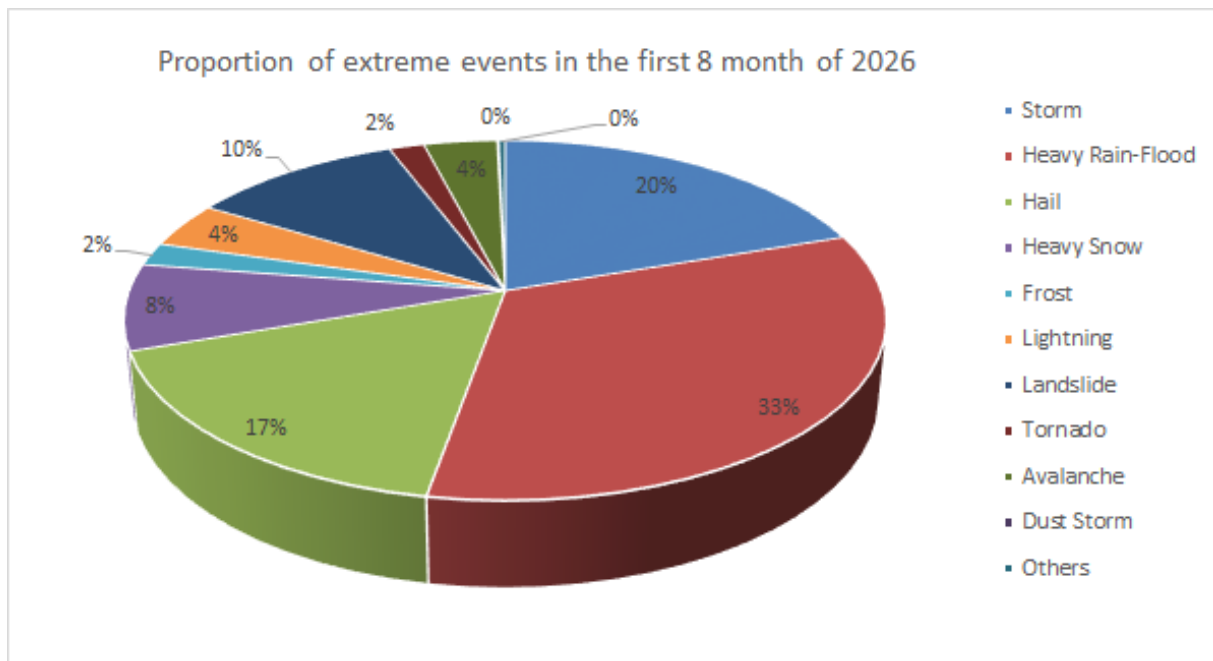


Figure 4. 2 Proportional distribution of extreme events in the first 8 months of 2026

In the first eight months of 2026, the most hazardous extreme events were heavy rainfall and floods with 33%, storms with 20%, hail with 17%, landslide with 10%, heavy snow with 8%, and lightning strikes and avalanche with 4% (Figure 4.2).

4.1. Storm and Heavy Rain

On May 3, 2026, strong winds that began around noon continued until the evening, accompanied by severe thunderstorms, heavy rainfall, hail and flash floods in the provinces of Şanlıurfa and Gaziantep. A severe storm and tornado occurred in Viranşehir district of Şanlıurfa, with wind speeds reaching 136.1 km/h.

These severe weather-related events caused casualties and damage. One person in Şanlıurfa died because a solar panel was torn from a roof and fell onto a car, while more than 40 people were injured. Houses and streets were submerged, roofs were ripped off and trees were uprooted. Numerous vehicles and buildings, agricultural lands and energy transmission lines were damaged. Some schools in these provinces suffered minor damage and were temporarily closed.



Source: Anadolu Agency

Figure 4.3. 3 May 2026, Thunderstorm in Şanlıurfa and Gaziantep (URL 4).

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