

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





# State of the Climate in November 2024



Climate and Agricultural Meteorology Department
Research Department

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#### 1. Introduction

The mean temperature of Türkiye in November 2024 was 9.2°C. This value was 0.1°C below the 1991-2020's normal (9.3°C).

In November 2024, mean temperatures were below seasonal normal in Boyabat and Bafra; above seasonal normal in Isparta, Fethiye, Senirkent, Kale-Demre; and around seasonal normal in other regions of Türkiye.

Regional temperatures remained around long-term (1991-2020) normal averages in all regions.

The lowest temperature was observed in Erzurum with -23.5 °C and the highest temperature was observed in Manavgat with 30.6 °C. No extreme temperature were recorded.

Türkiye's areal mean precipitation in November 2024 was 54.8 mm. This value is approximately 6% below the 1991-2020's normal (58.3 mm).

In November, precipitation increased by more than 80% compared to normal in the Sakarya, Düzce, Karabük, Sinop, Samsun, Giresun, Antalya ve Mersin, A decrease of more than 40% compared to normal was observed in west of Marmara, North Aegean, Central Anatolia, west of Muğla and Burdur, Isparta, Uşak, Afyonkarahisar, Sivas, Hatay, Şanlıurfa, Mardin and the eastern parts of Eastern Anatolia. In November, the highest precipitation was occurred in Rize with 199.6 mm and lowest recorded with 10.3 mm precipitation in Iğdır.

Regional precipitation in November were below normal (1991-2020) in all regions except Black Sea and region

The number of rainy days in November 2024 in Türkiye was near normal with 8.4 days (1991-2020 normal is 8.4 days). The number of rainy days was between 10-15 days in the Black Sea Region, the southeast of the Eastern Anatolia Region, Istanbul, Bursa, Yalova, Balıkesir, Hatay, Siirt and Şırnak, and dropped below 5 days in the areas around Edirne and Konya.

There are 125 extreme events have been reported in November 2024 in TSMS's Kardelen Database. Percentage of extreme events recorded in November 2024 were storm-tornado (38%), heavy snow (%31), heavy rain-flood (18%), frost (%5), landslide (%3), fog (3%), hail (1%), lighning (1%)

#### 2. Temperature

The mean temperature of Türkiye in November 2024 was 9.2°C. This value was 0.1°C below the 1991-2020's normal (9.3°C).Fig.2.1).

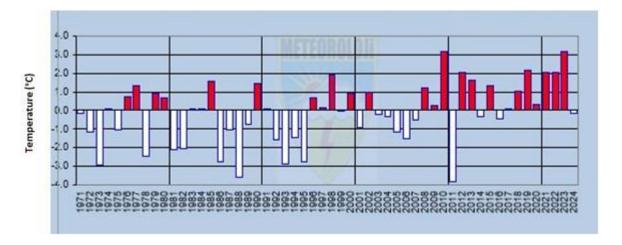


Figure 2.1 Monthly mean temperature anomalies in November (Url 1).

In November 2024, mean temperatures of the regions were around seasonal norms. . (Fig.2.2).

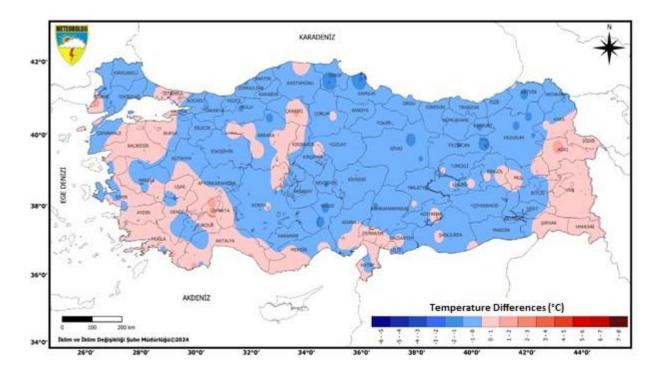


Figure 2.2. Spatial distribution of mean temperature anomaly in Türkiye in November 2024 (Url 1).

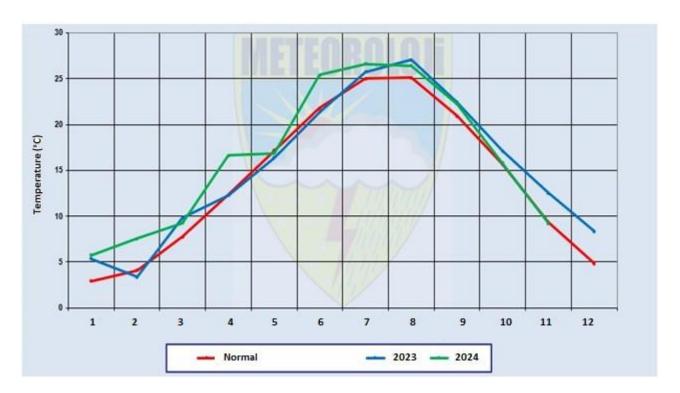


Figure 2. 3 The difference of the monthly mean temperature in 2024 from normal (1991-2020) (Url 1).

The monthly mean temperature in November around seasonal its normal.

#### 2.1. Regional Temperature

Regional temperatures followed normal long-term averages (1991-2020) in all regions except the Black Sea and of the C. Eastern Anatolia Region. (Fig. 2.4).



Figure 2. 4 Regional mean temperature differences in November 2024 (Url 1).

#### 2.2. Extreme Temperature

The lowest temperature was observed in Erzurum with -23.5 °C and the highest temperature was observed in Manavgat with 30.6 °C. There were no extreme maximum temperature records observed.

#### 3. Precipitation

Türkiye's areal mean precipitation in November 2024 was 54.8 mm. This value is approximately 6% below the 1991-2020's normal (58.3 mm) (Fig. 3.1)

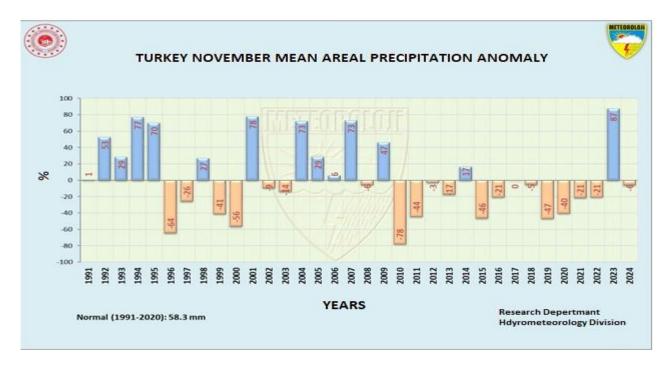


Figure 3. 1 Areal precipitation anomaly in November in Türkiye (Url 2).

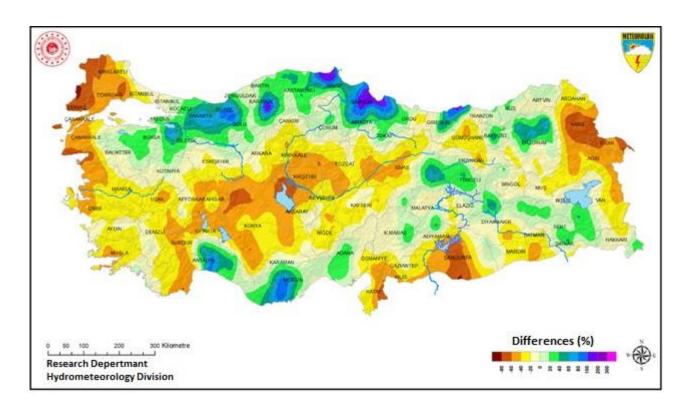


Figure 3. 2 Spatial distribution of mean precipitation anomalies in November 2024 (Url 2).

In November, precipitation increased by more than 80% compared to normal in the Sakarya, Düzce, Karabük, Sinop, Samsun, Giresun, Antalya ve Mersin, A decrease of more than 40% compared to normal was observed in west of Marmara, North Aegean, Central Anatolia, west of Muğla and Burdur, Isparta, Uşak, Afyonkarahisar, Sivas, Hatay, Şanlıurfa, Mardin and the eastern parts of Eastern Anatolia. (Fig. 3.2).

#### 3.1. Regional Precipitation

Regional precipitation in were below normal (1991-2020) in Marmara, Aegean, C. Anatolia, S. E. Anatolia; near normal in Mediterranean and E.Anatolia; above normal in Black Sea region. (Figure 3.3).

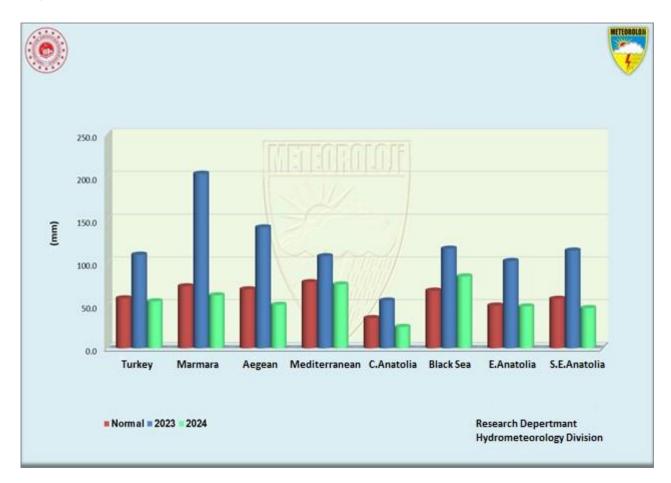


Figure 3. 3 Regional Precipitation Differences in November 2024 (Url 2).

#### 3.2. Rainy Days

The number of rainy days in November 2024 in Türkiye was near normal with 8.4 days (1991-2020 normal is 8.4 days). The number of rainy days was between 10-15 days in the Black Sea Region, the southeast of the Eastern Anatolia Region, Istanbul, Bursa, Yalova, Balıkesir, Hatay, Siirt and Şırnak, and dropped below 5 days in the areas around Edirne and Konya.

(Fig. 3.4).

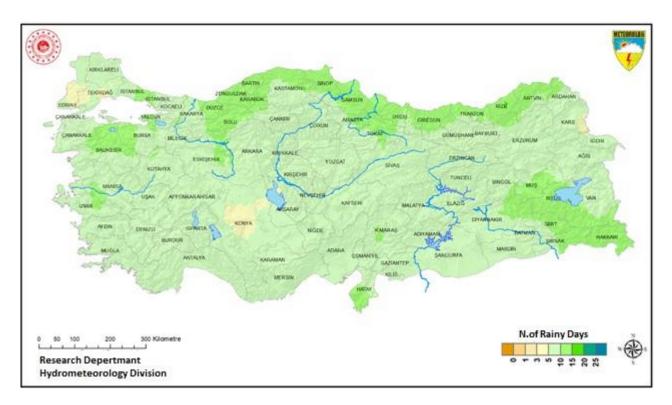


Figure 3. Number of rainy days in November 2024 (Url 2).

#### 4. Extreme Meteorological Events

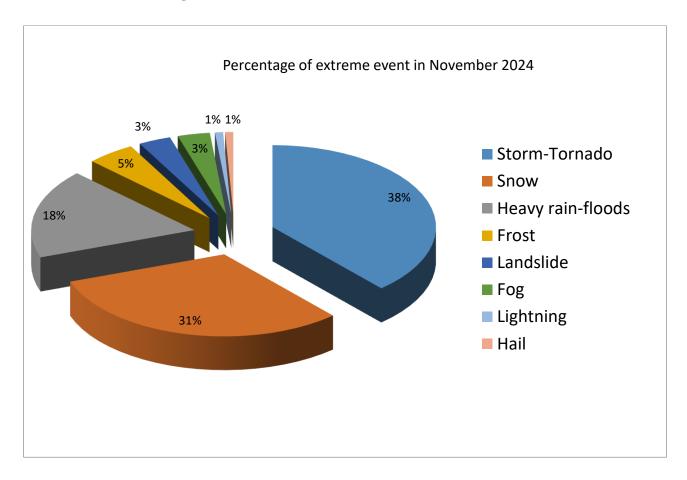


Figure 4.1. Percentage of extreme event in November 2024 (Url 3).

There are 125 extreme events have been reported in November 2024 in TSMS's Kardelen Database. Percentage of extreme events recorded in November 2024 were storm-tornado (38%), heavy snow (%31), heavy rain-flood (18%), frost (%5), landslide (%3), fog (3%), hail (1%), ligthning (1%) (Fig. 4.1).

#### References

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