



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



State of the Climate in April 2023



Climate and Agricultural Meteorology Department
Research Department

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2023

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1. Introduction

The mean temperature of Türkiye in April 2023 was 12.3°C. This value was exactly the same with 1991-2020's normal (12.3°C),

Mean temperatures in April 2023 are above normal in Sinop and Kale (Demre), below normal in Korkuteli; while it is was near normal in other great parts of the country.

Regional temperatures were above the long-term mean (1991-2020) in Marmara, Black Sea, Eastern Anatolia Region while they were below it in others.

The lowest temperature was observed in Sarız, Kayseri with -9.4°C and the highest temperature was observed in Ceyhan, Adana with 31.5°C. There were no new extreme temperatures were recorded.

Türkiye's areal mean precipitation in April 2023 was 86.8 mm. This value is approximately 51 % above the 1991-2020's normal (57.5 mm).

Precipitation showed a slight decrease in Gaziantep, Kilis, Hatay, Çorum, Konya, Anamur and Mardin while it was above normal in most of the country (Fig. 3.2).

In April, the highest precipitation was occurred in Bingöl with 165.7 mm and lowest recorded with 25.8 mm precipitation in Kilis.

Regional precipitation in April was above normal (1991-2020) in all regions

The average number of rainy days in April 2023 in Türkiye was 15.1, which is above the 1991-2020 normal (10.8 days). The number of rainy days was between 20-25 days in the Western Black Sea, Samsun, Çorum, Amasya, Tokat, Ordu, Giresun, Kahramanmaraş, Rize and Kars, while it was 5-10 days in the Coastal Aegean, Mersin, Hatay and Southeastern Anatolia Region.

There are 75 extreme events have been reported in April 2023 in TSMS's Kardelen Database. Percentage of extreme events recorded in April 2023 were storm-tornado (25%), hail (25%), heavy rain-flood (23%), landslide (5%), frost (10%), lightning (5%), snow (5%) and avalanche (2%).

2. Temperature

The mean temperature of Türkiye in April 2023 was 12.3°C. This value was exactly the same with 1991-2020's normal (12.3°C), (Fig.2.1).

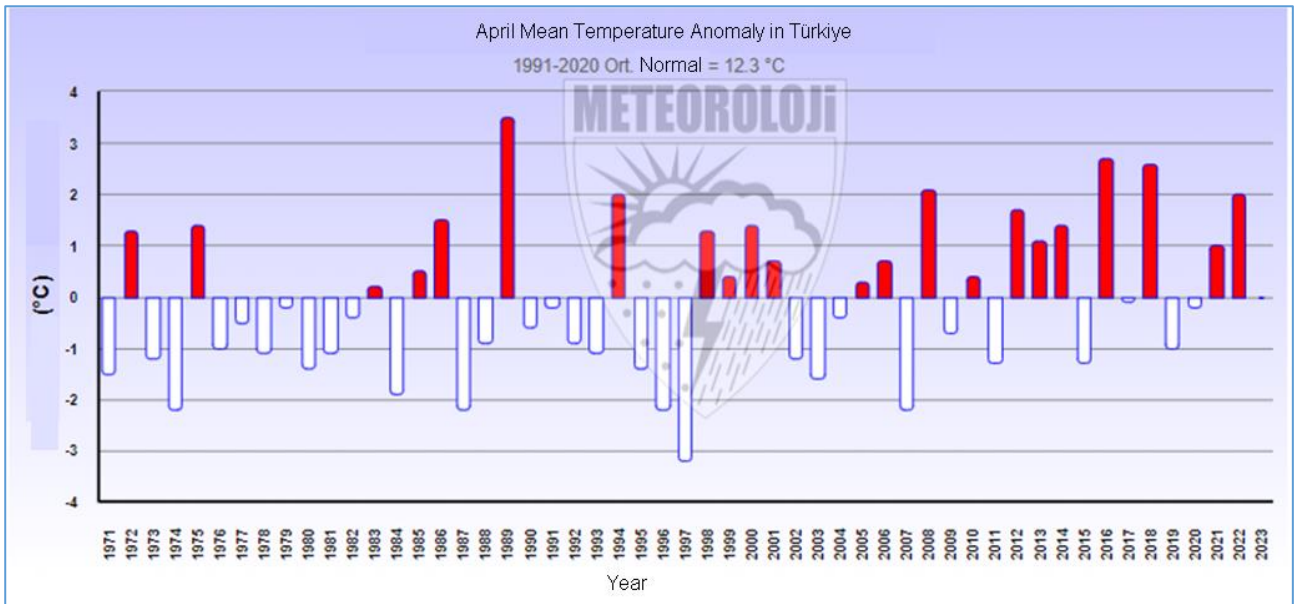


Figure 2.1 Monthly mean temperature anomalies in April

Mean temperatures in April 2023 are above normal in Sinop and Kale (Demre), below normal in Korkuteli; while it was near normal in other great parts of the country (Fig.2.2).

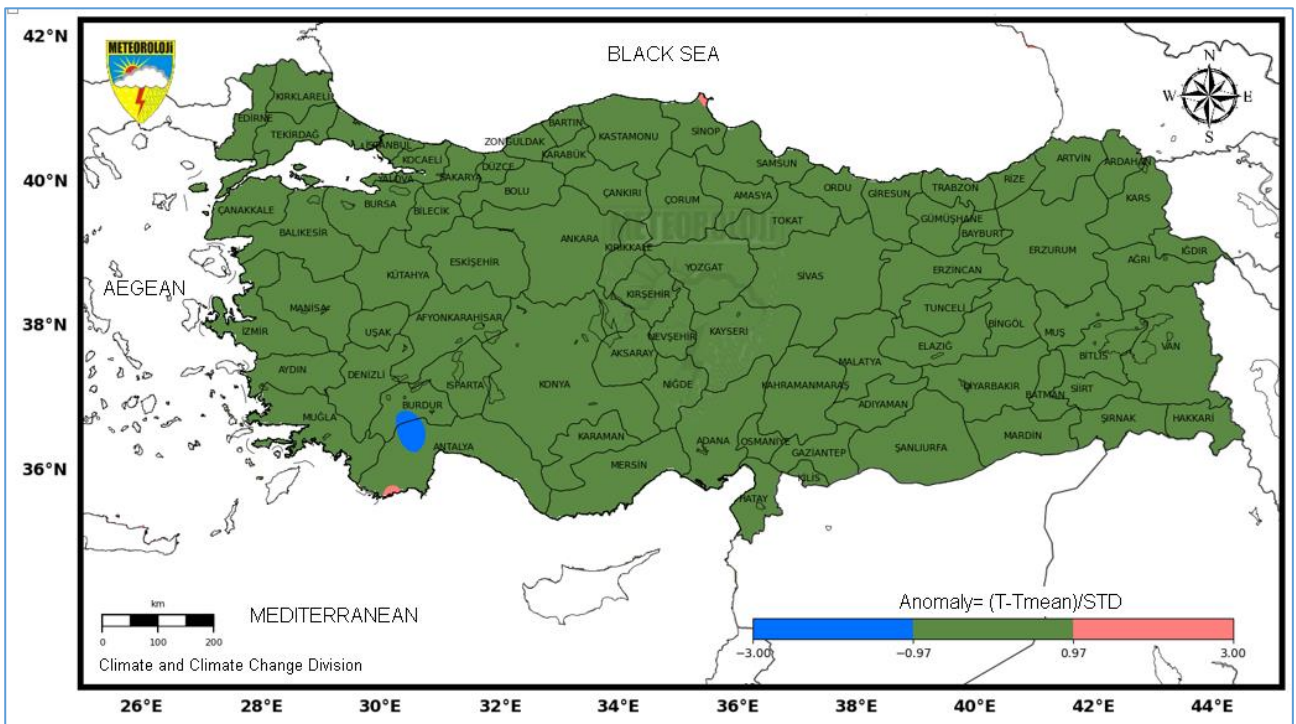


Figure 2.2. Spatial distribution of mean temperature anomaly in Türkiye in April 2023

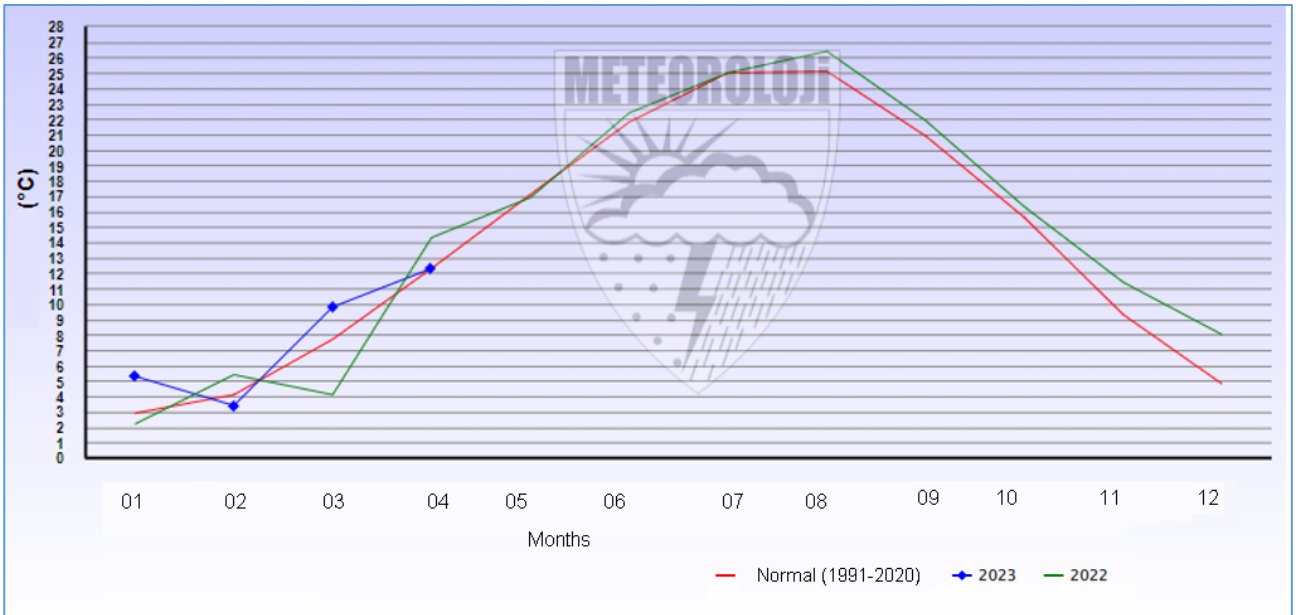


Figure 2. 3 The difference of the monthly mean temperature in 2023 from normal (1991-2020) and last year's

The monthly mean temperatures of April was near normal.

2.1. Regional Temperature

Regional temperatures were above the long-term mean (1991-2020) in Marmara, Black Sea, Eastern Anatolia Region while they were below it in others (Fig. 2.4).

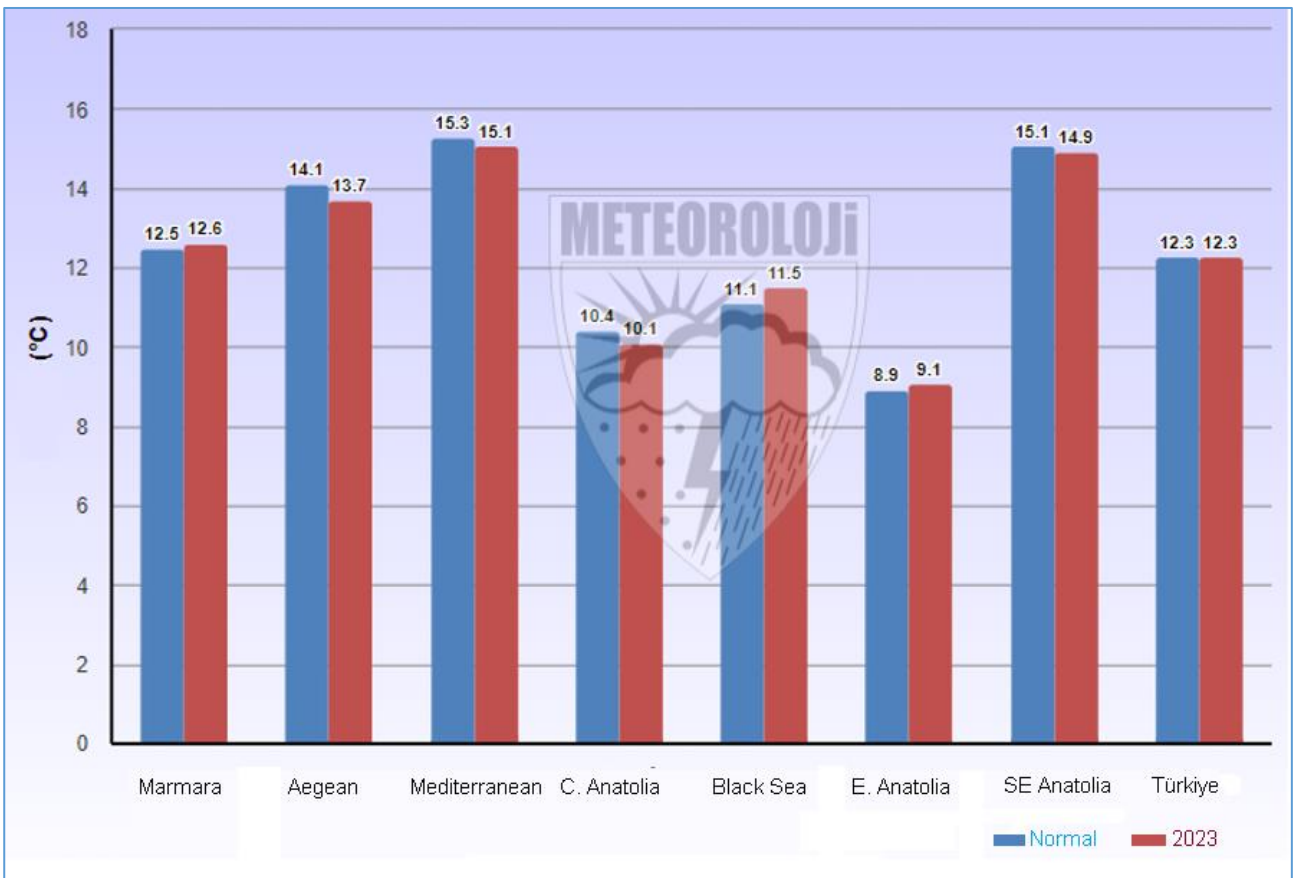


Figure 2. 4 Regional mean temperature differences in April 2023

2.2. Extreme Temperature

The lowest temperature was observed in Sarız, Kayseri with -9.4°C and the highest temperature was observed in Ceyhan, Adana with 31.5°C . There were no new extreme temperatures were recorded.

3. Precipitation

Türkiye's areal mean precipitation in April 2023 was 86.8 mm. This value is approximately 51 % above the 1991-2020's normal (57.5 mm) (Fig. 3.1).

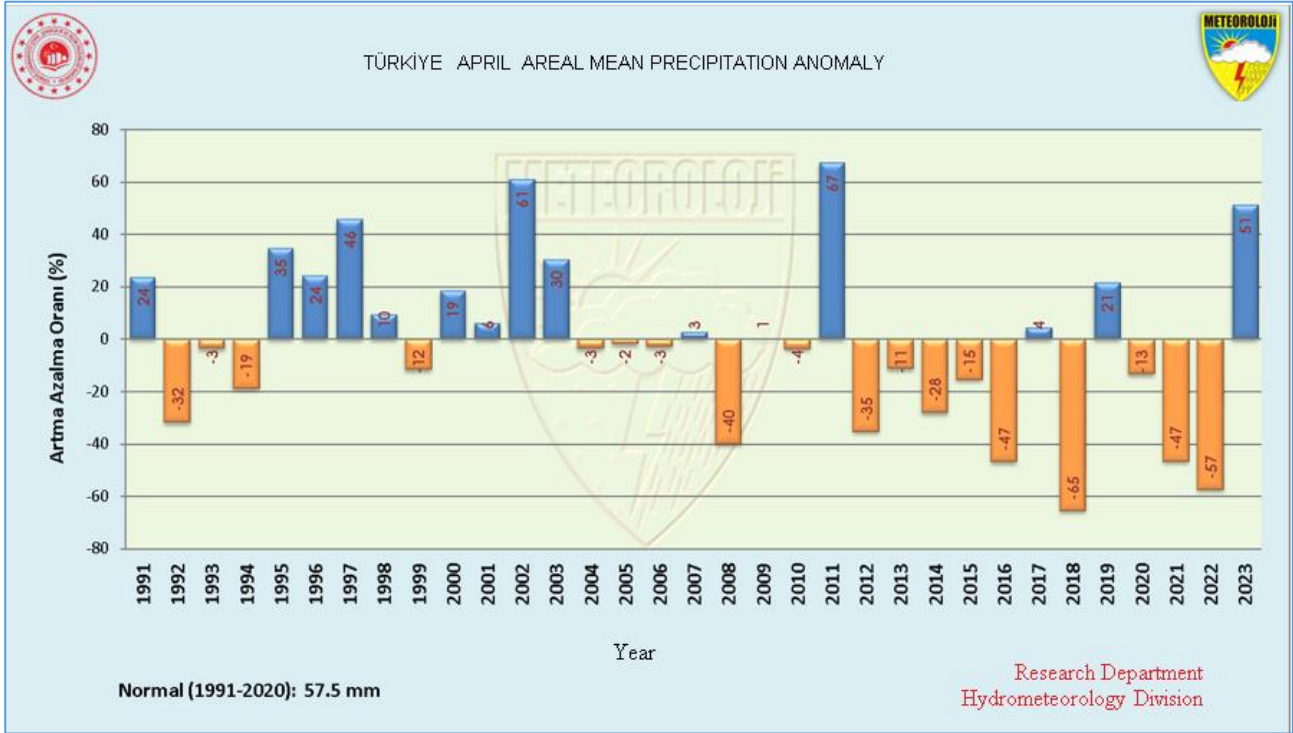


Figure 3. 1 Areal precipitation anomaly in April in Türkiye

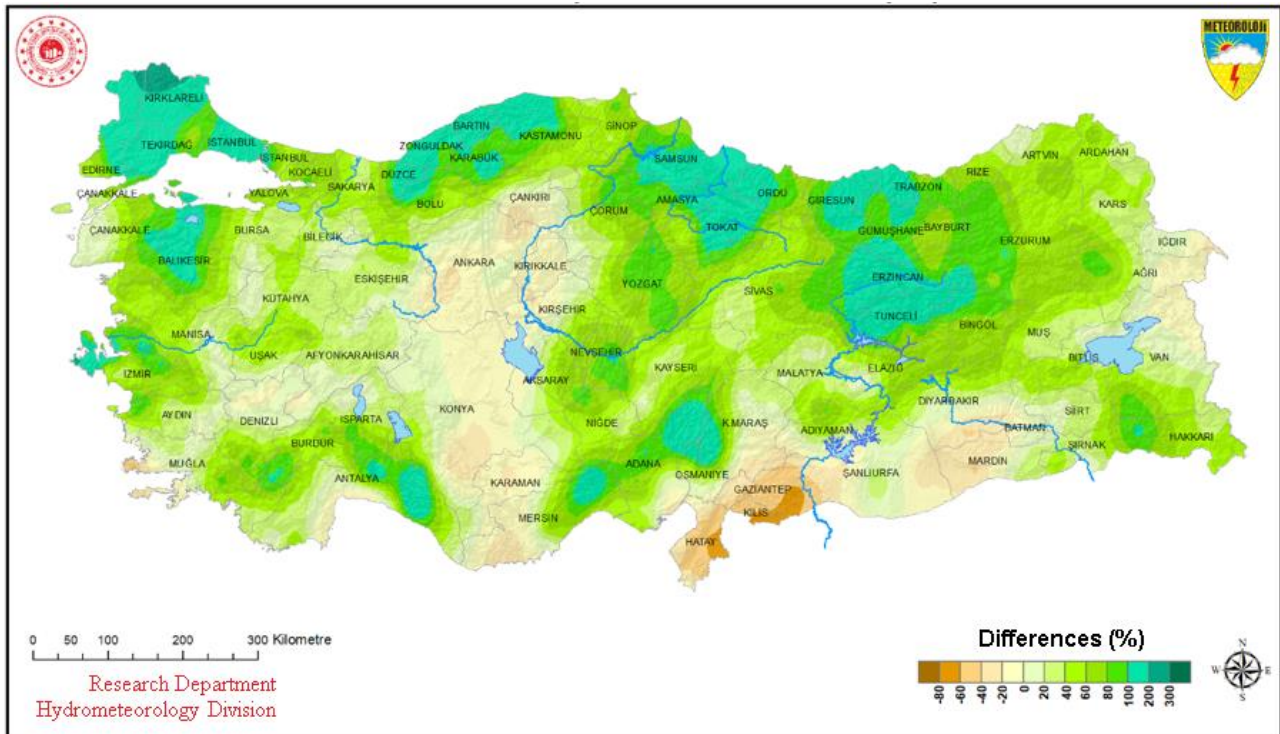


Figure 3. 2 Spatial distribution of mean precipitation anomalies in April 2023

Precipitation showed a slight decrease in Gaziantep, Kilis, Hatay, Çorum, Konya, Anamur and Mardin while it was above normal in most of the country (Fig. 3.2). In April, the highest precipitation was occurred in Bingöl with 165.7 mm and lowest recorded with 25.8 mm precipitation in Kilis.

3.1. Regional Precipitation

Regional precipitation in April was above normal (1991-2020) in all regions (Figure 3.3).

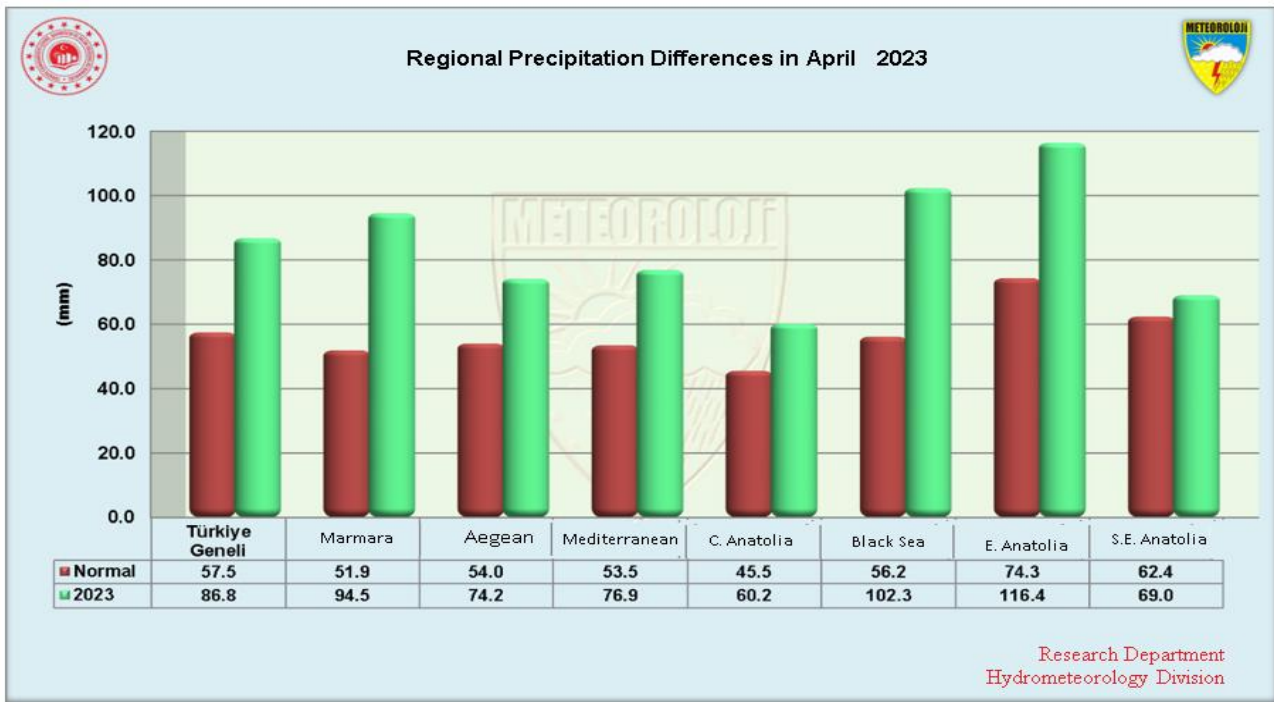


Figure 3.3 Regional Precipitation Differences in April 2023

3.2. Rainy Days

The average number of rainy days in April 2023 in Türkiye was 15.1, which is above the 1991-2020 normal (10.8 days). The number of rainy days was between 20-25 days in the Western Black Sea, Samsun, Çorum, Amasya, Tokat, Ordu, Giresun, Kahramanmaraş, Rize and Kars, while it was 5-10 days in the Coastal Aegean, Mersin, Hatay and Southeastern Anatolia Region (Fig. 3.4).

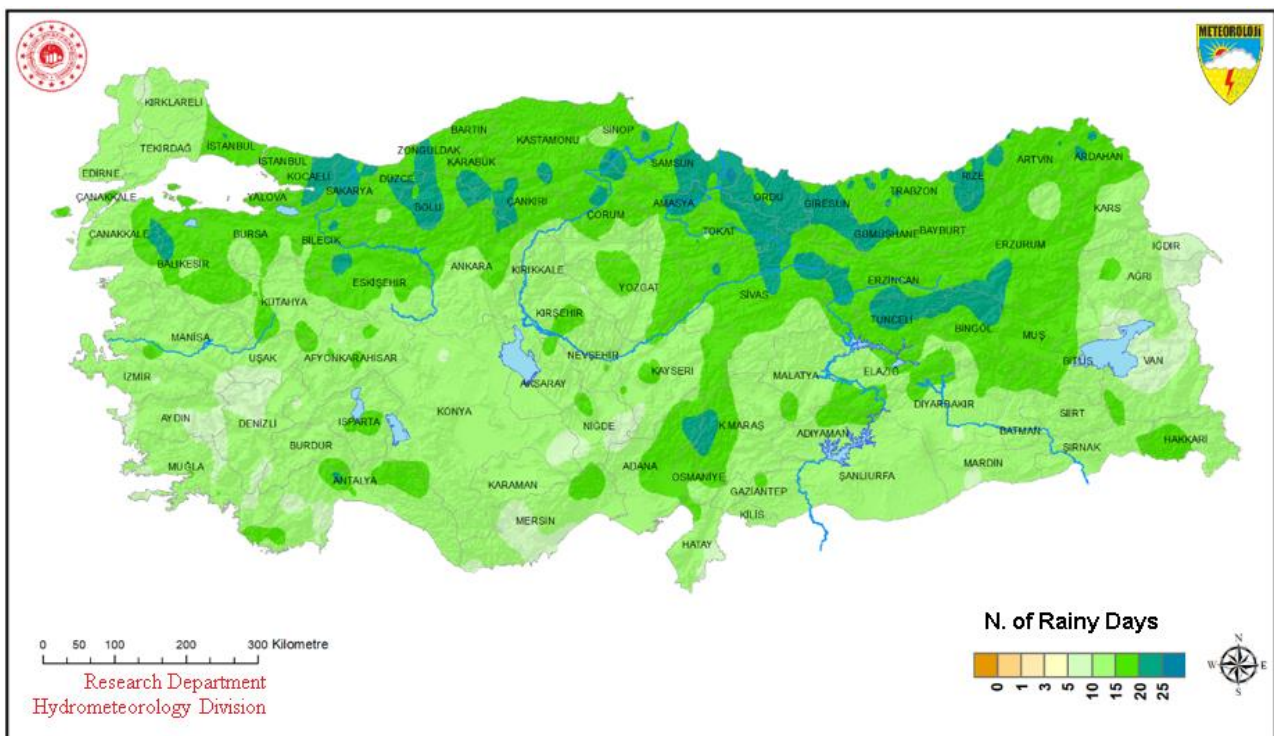


Figure 3.4 Number of rainy days in April 2023

3. Extreme Meteorological Events

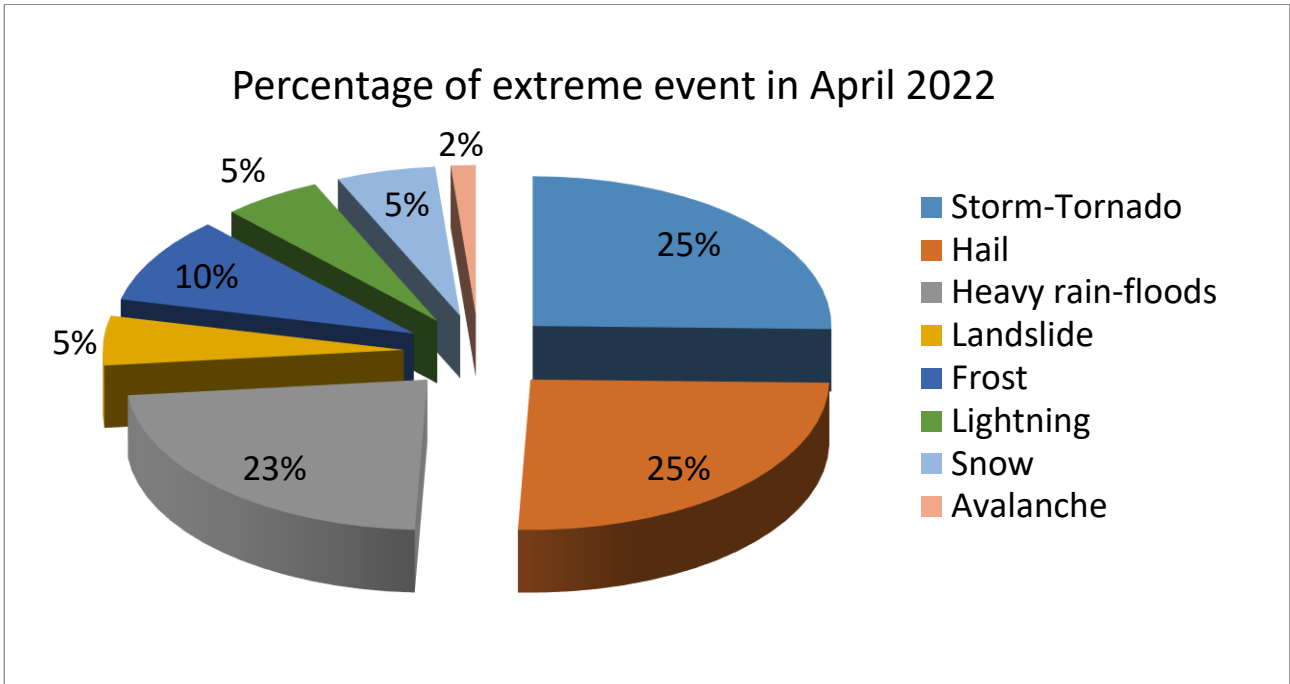


Figure 4.1. Percentage of extreme event in April 2023

There are 75 extreme events have been reported in April 2023 in TSMS's Kardelen Database. Percentage of extreme events recorded in April 2023 were storm-tornado (25%), hail (25%), heavy rain-flood (23%), landslide (5%), frost (10%), lightning (5%), snow (5%) and avalanche (2%) (Fig. 4.1).



Figure 4.2. Hail in Adiyaman on 20 April 2023

Plum-sized hail that rained in Adiyaman on April 20 blew up the windows of the vehicles and caused damage to the cultivated areas. The hail, which was effective for about 10 minutes, paralyzed life.

References

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<http://www.mgm.gov.tr/veridegerlendirme/sicaklik-analizi.aspx>
2. URL 2, Turkish State Meteorological Service, precipitation analysis
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<http://kardelen.mgm.gov.tr/BultenGenel/Klima/fevkGlnYeni.aspx>



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