

Country: Türkiye

Institute: Turkish State Meteorological Service

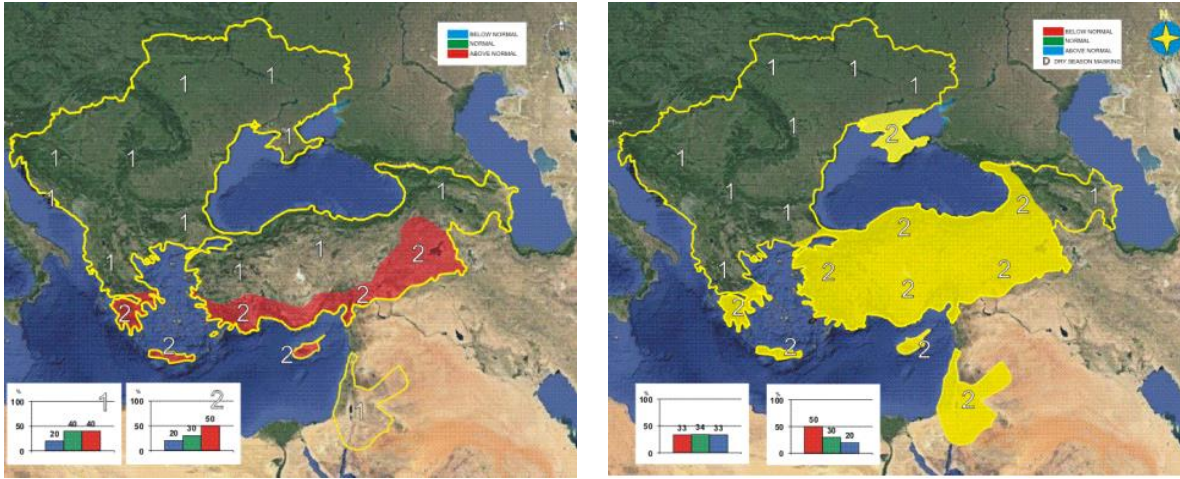
Name: Hüdaverdi Gürkan

E-mail: hgurkan@mgm.gov.tr

Assessment of the seasonal forecast for the winter season

DJF 2022-2023

1. SEECOF-28 climate outlook for 2022/23 winter season:



According to the SEECOF-28 consensus, the statement temperature was expected to be near or above normal for most parts of the country and above normal for the southern regions, for the precipitation was expected below normal for whole Türkiye.

2. Analysis of 2022/23 winter season:

The reference period is 1991-2020.

Türkiye's 1991-2020 winter mean temperature is 3.9 °C. The mean temperature of 2022/23 winter season was 5.6 °C and 1.7 °C above seasonal normal.

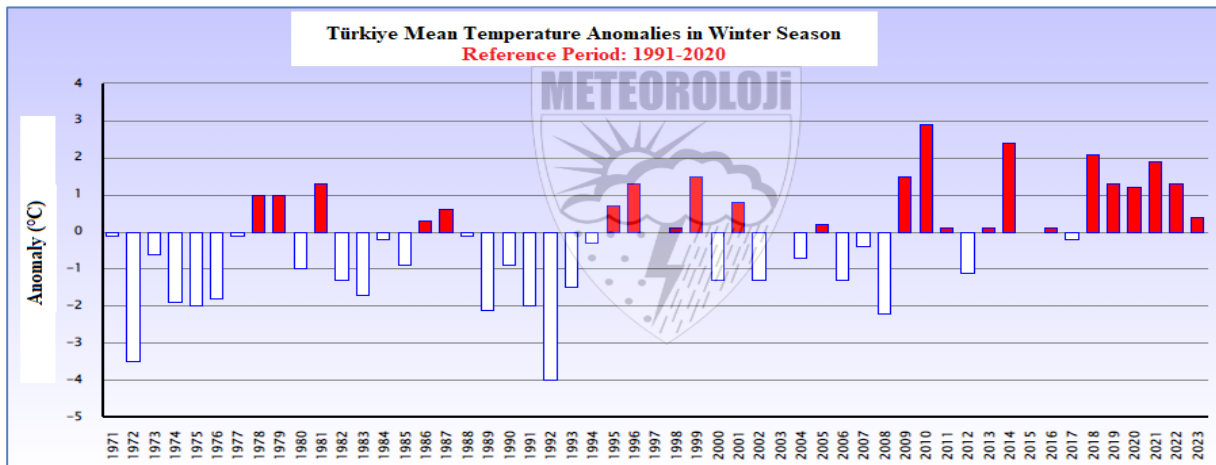


Figure 1. Türkiye Mean Temperature Anomalies in Winter Season

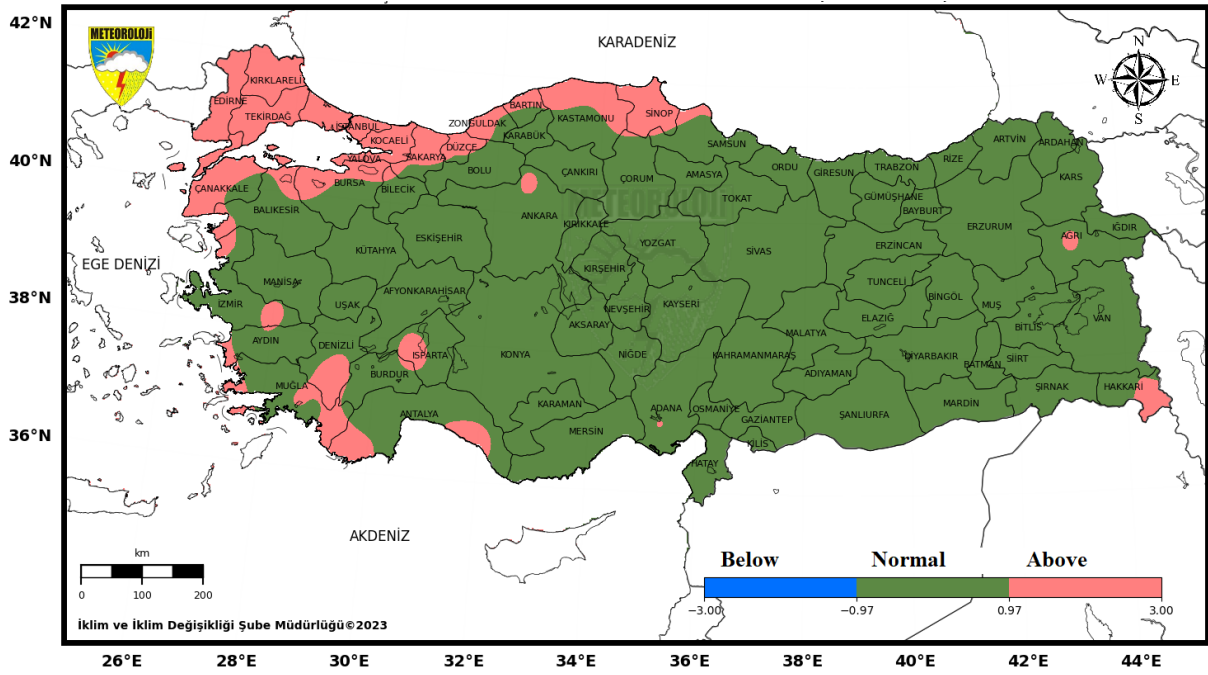


Figure 2. Türkiye Mean Temperature Anomalies in 2022/23 Winter Season (Ref: 1991-2020)

The temperature was observed near normal almost all over the country except the northern western part of Türkiye.

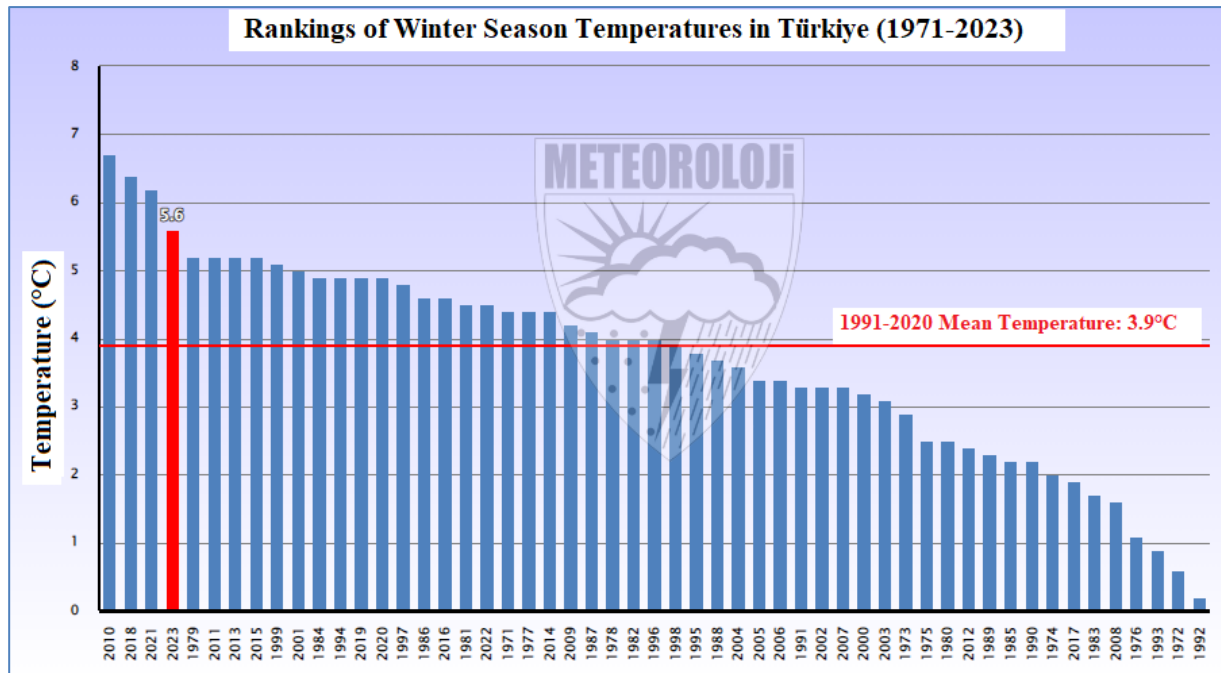


Figure 3. Rankings of the winter season temperature of Türkiye (1971-2023)

The winter season of 2022/23 marked as the 4th warmest winter in 53 years period (1971-2023).

Precipitation:

Türkiye's 1991-2020 winter season mean total precipitation is 205.3 mm. The mean total precipitation of 2022/23 winter season was 114.8 mm and % 44 below normal. The second-lowest winter precipitation in the last 63 years has been recorded in Türkiye.

In General, precipitation was;

- Below normal in almost all of Türkiye, except for the Black Sea coastal areas.
- The highest decrease in precipitation occurred in the Central Anatolia Region **with 55%**.

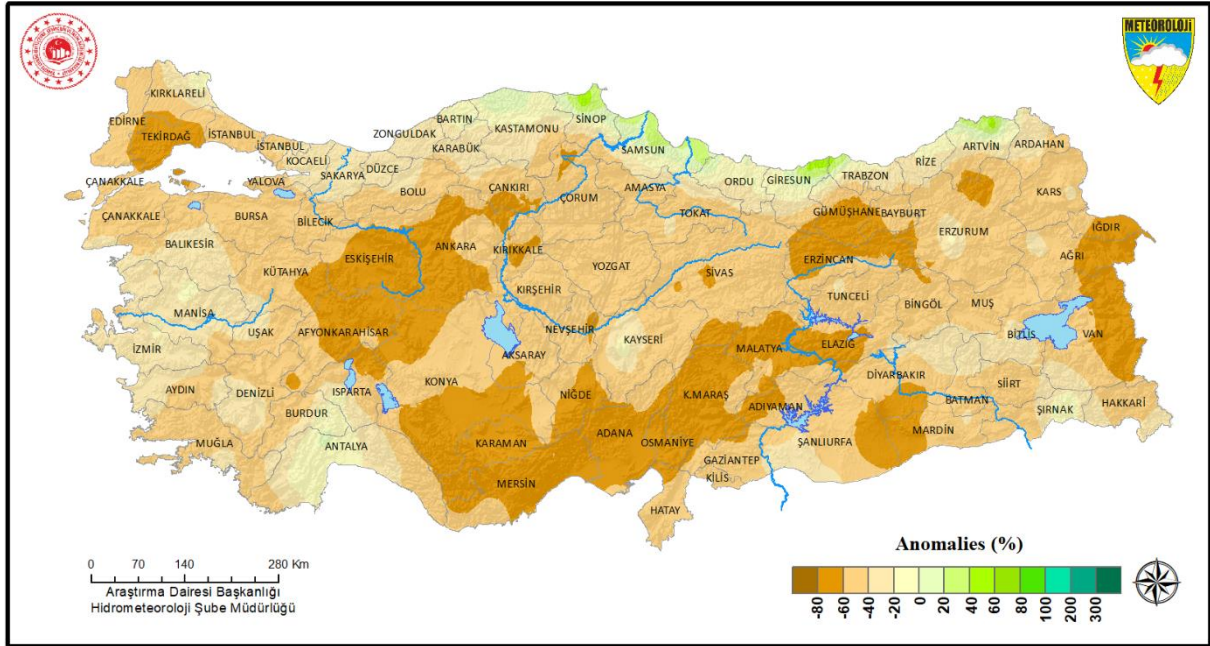


Figure 3 Türkiye Precipitation Anomalies in 2022/23 Winter Season

Meteorological Extreme Events:

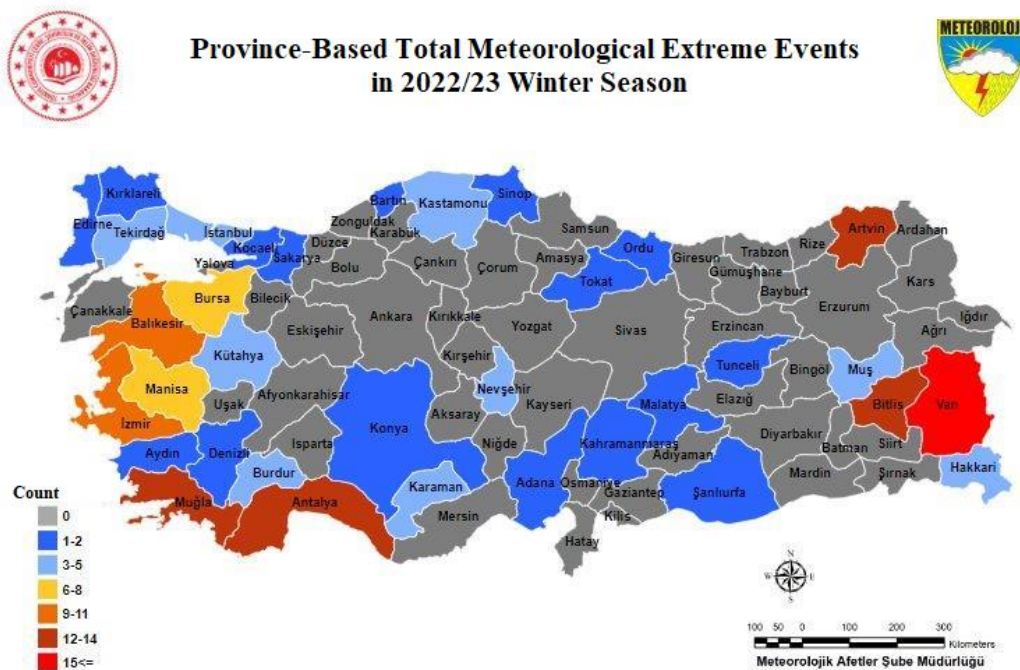


Figure 4 Türkiye Province-based Total Meteorological Events in 2022/23 Winter Season

A total of 157 extreme meteorological events occurred in the winter season of 2022/23.

3. High Impact Events:

- The 2022/23 winter season was **the second driest** in the last 63 years with a decrease of 44%.
- December 2022 was **the hottest December** on record with an anomaly of 3.2°C.
- January 2023 was **the second hottest January** on record with an anomaly of 2.4°C.
- **14 stations** reached new **monthly maximum temperature** record in in the 2022/23 winter season.

4. Verification of the SEECOF-28 climate outlook for 2022/23 winter season:

Country	Seasonal temperature DJF		Seasonal precipitation DJF	
	Observed	SEECOF-28 climate outlook for temperature	Observed	SEECOF-28 climate outlook for precipitation
Türkiye	Near or Above normal	Near or Above normal	Below normal	Below normal