Country: Turkey

Institute: Turkish State Meteorological Service

Name: Hüdaverdi Gürkan

E-mail: <u>hgurkan@mgm.gov.tr</u>

Assessment of the seasonal forecast for the winter season

DJF 2020-2021

1. SEECOF-24 climate outlook for 2020/21 winter season:



According to the SEECOF-24 consensus, statement temperature was expected to be above normal for the most part of the country except the eastern region for the 2020/21 winter season, for the precipitation it was expected below normal for most part of the country and there was no clear signal for the northern coast of Turkey.

2. Analysis of 2020/21 winter season:

The reference period is 1981-2010.

Turkey's 1981-2010 winter mean temperature is 3.6 °C. The mean temperature of 2020/21 winter season was 6.2 °C and 2.6 °C above seasonal normal.



Figure 1 Turkey Mean Temperature Anomalies in 2020/21 Winter Season



Figure 2 Turkey Mean Temperature Anomalies in 2020/21 Winter Season

The temperature was observed above normal almost all over the country except the eastern part of Turkey.



Figure 3 Rankings of the winter season temperature of Turkey (1971-2021)

The winter season of 2020/21 marked as the third warmest winter in 50 years period (1971-2020).

Precipitation;

Turkey's 1981-2010 winter season mean total precipitation is 204.4 mm. The mean total precipitation of 2020/21 winter season was 171.4 mm and % 16 below normal. In General, precipitation was;

• Below normal except western part of country.

- The mean total precipitation was **above normal more than 30 %** in the western part,
- The mean total precipitation was **below normal more than 30 %** in the central part of Turkey.



2021 KIŞ MEVSİMİ ALANSAL YAĞIŞLARIN NORMALLERİ İLE KARŞILAŞTIRILMASI

Figure 3 Turkey Precipitation Anomalies in 2020/21 Winter Season

3. High Impact Events:

- December 2020 was the <u>sixth warmest</u> December in the long term period (1971-2020). Turkey's December Mean temperature is 4.6°C, December 2019 mean temperature was 7.2°C.
- January 2021 was the <u>second warmest</u> January in the long term period (1971-2020). Turkey's January Mean temperature is 2.7°C, January 2021 mean temperature was 5.4°C.
- 72 stations reached new monthly maximum temperature record in January 2021.
- 6 stations reached new monthly maximum temperature record in February 2021.

4. Verification of the SEECOF-24 climate outlook for 2020/21 winter season:

Country	Seasonal temperature DJF		Seasonal precipitation DJF	
	Observed	SEECOF-24 climate outlook for temperature	Observed	SEECOF-24 climate outlook for precipitation
Turkey	Above normal at most part of Turkey - Near normal at eastern part	Above normal at most part of Turkey - Near normal at eastern part	Below normal at most part of Turkey - Above normal at western part of Turkey	Below normal at most part of Turkey - No clear signal for the northern part of Turkey