Country: Turkey

Institute: Turkish State Meteorological Service

Name: Başak Yazıcı

E-mail: byazici@mgm.gov.tr

Assessment of the seasonal forecast for the winter season

DJF 2017-2018

1. SEECOF-18 climate outlook for 2017-2018 winter season:

In SEECOF-18 consensus statement, for 2017-2018 winter season, temperatures in Turkey was expected to be mostly above normal. Precipitation was expected to be below normal in the southern regions of Turkey and there was no signal for the other parts of the country.

2. Analysis of the 2017-2018 winter season:

Temperature of December 2017

Mean temperature of December 2017 has been 7.1°C while the long term mean temperatures of December is 4.8°C. Lowest temperature was observed in Yüksekova as -22.5°C and the highest temperature was observed in Samsun as 26.0°C.

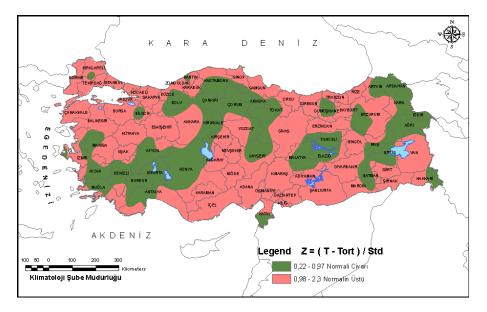


Figure 1. December-2017 Mean Temperature Anomalies

Precipitation of December 2017

Precipitation in December 2017 was lower than December precipitation normal and also previous year's precipitation. Mean precipitation of December 2017 is 55,4 mm, December precipitation normal is 78,3 mm and December 2017 mean precipitation is 81,1 mm. December 2017 precipitation was decreased by %29,2 compared to normals and decreased by %31,7 compared to last year's precipitation.

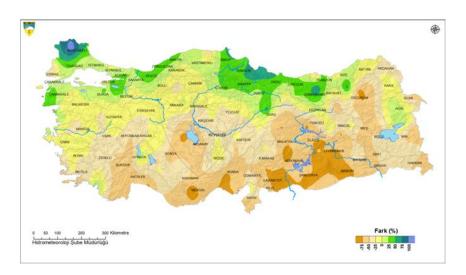


Figure 2. December-2017 Precipitation Anomalies

Temperature of January 2018

January 2018 mean tempeartures were mostly above normals in the east part of the country. Long term mean temperature of January is 2.7°C, and the mean temperature of January 2018 has been 4.8°C. The lowest temperature was observed in Erzurum as -22.5°C, and the highest temperature was observed in 21,3°C in Finike.

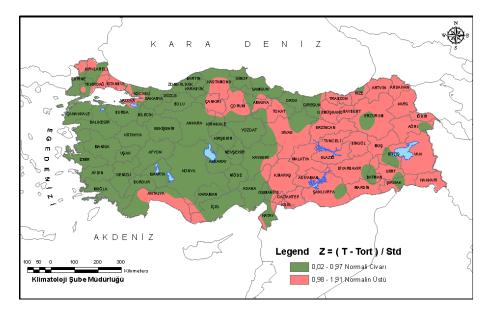


Figure 3. January-2018 Mean Temperature Anomalies

Precipitation of January 2018

Precipitation was above January precipitation normal and the precipitation of January 2017. All the country had above normal precipitation except from the western regions. The highest increase in precipitation was observed in the southern regions by 49% increase. While the precipitation normal of January is 65,8 mm, average precipitation for January 2017 was 81,4 mm, and for January 2017, it was 72,5 mm. Precipitation has increased by 23,7 % compared to the normal, and by 52,6 % compared to January 2017.

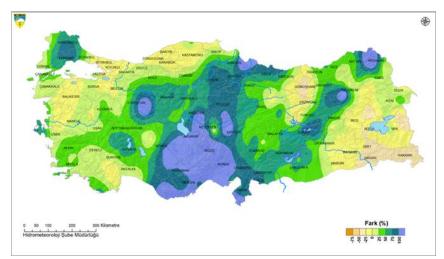


Figure 4. January-2018 Precipitation Anomalies

Temperature of February 2018

Mean temperatures for February 2018 were above normal in the whole country except from the north western region. While the long term average temperature for February is 3.4°C and it was 7.5°C for February 2018. The lowest temperature for the month was -23.1°C in Erzurum, and the highest was 24.8°C in Samsun.

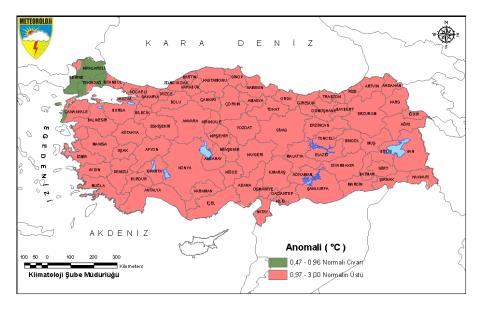


Figure 5. February-2018 Mean Temperature Anomalies

Precipitation of February 2018

February 2018 precipitation was less than both February precipitation normal and higher than February 2017 precipitation. While the precipitation normal of February is 61,4 mm, average precipitation for February 2018 was 48,3 mm, and for February 2017, it was 16,9 mm. Precipitation has decreased by 21 % compared to the normal, and increased by more than 100% compared to January 2017.



Figure 6. February-2018 Precipitation Anomalies

3. Verification of the SEECOF-18 climate outlook for 2017-2018 winter season:

1981-2010 mean temperature for winter season is 3.6°C. Mean temperature of 2017-2018 winter season was 6.4°C, and 2.8°C above the normal. December 2017, January 2018 and February 2018 mean temperatures were above the mean temperatures of 1981-2010.

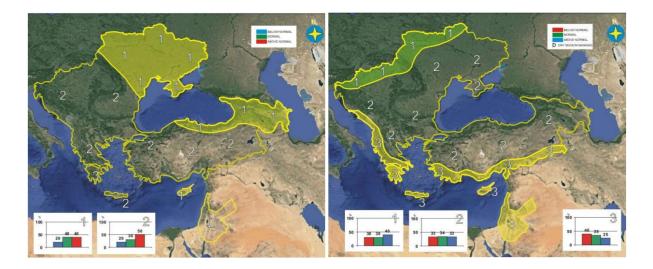
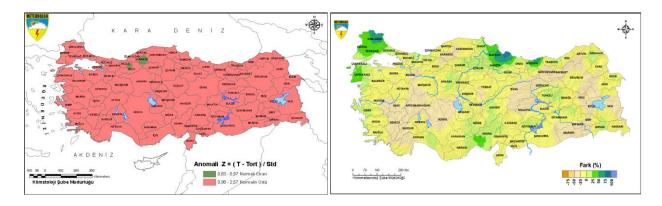


Figure 7-8. Graphical Presentation of 2017-2018 Winter Season Temperature and Precipitation Outlook



| Figure 9-10. | 2017-2018 | Winter | Season | Mean | Temperature | and | Precipitation | Anomaly | of |
|--------------|-----------|--------|--------|------|-------------|-----|---------------|---------|----|
| Turkey | | | | | | | | | |

| Consta | Seasonal temperature DJF | | Seasona | l precipitation DJF | | |
|-------------|-----------------------------|--|---|---|--|--|
| Countr y | Observed | SEECOF- 18 climate outlook for temperature | Observed | SEECOF-18 climate outlook for precipitation | High Impact Events | |
| Turkey | Above normal | 40% above normal, 40% normal, 20% below normal (in north eastern regions) 50% above normal, 30% normal, 20% below normal(in the whole country except northeastern part) | Mostly normal to below normal Above normal only in small regions in the north | 40% above normal, 30% around normal and 30% above normal (in the whole country except the south part) 33% below normal, 34% normal and 33% above normal (southern regions of the country) | In December 2017, frost damaged yields in greenhouses in Balıkesir. Heavy rain caused flood in Ordu and Çanakkale which damaged some buildings and roads. In January 2018, avalanche occurred in Bitlis. Landslide occurred in Silifke and caused damages in infrastructure. In February 2018, heavy rain and flood caused damages in buildings in Çanakkale. In Şanlıurfa, two people have lost their lives because of the flood. | |