Country: Turkey

Institute: Turkish State Meteorological Service

Name: Başak Yazıcı

E-mail: byazici@mgm.gov.tr

Assessment of the seasonal forecast for the summer season

JJA 2018

1. SEECOF-19 climate outlook for 2018 summer season:

According to SEECOF-19 climate temperature was expected to be above normal for summer 2018, and there was no clear signal for precipitation.

2. Analysis of 2018 summer season:

Temperature of June 2018

In June 2018, temperature values were around normal in nortestern part of Marmara, Aegean region and the eastern part of the country. In the other parts of the country, temperature was above normal. While long range mean temperature for June is 21.3°C, mean temperature of June 2018 was 22.3°. The lowest temperature was observed in Sarız as 2.8°C, and the highest temperature was observed in Cizre as 44.7°C.



Figure 1. June 2018 Mean Temperature Anomalies

Precipitation of June 2018

Precipitation during June 2018 was around normal and was higher than previous year's precipitation in general. Aegean region had 3 times higher precipitation, Mediterranean region had 2 times higher precipitation than their normal.

Mean precipitation for June 2018 is 50.7 mm, for June 2017 is 35.0 mm, and the June precipitation normal is 30.8 mm. Precipitation of June 2018 was higher by 64.6% compared to its normal and higher than 44.9% higher compared to previous June.



Figure 2. June 2018 Precipitation Anomalies

Temperature of July 2018

June 2018 temperature was 25.8°C, while the long term mean temperature for June is 24.5°C. Lowest temperature was observed in Erzurum as 4.7°C and the highest temperature was observed in Cizre as 47.4°C.



Figure 3. July 2018 Mean Temperature Anomalies

Precipitation of July 2018

June 2018 precipitation was higher than previous June precipitation and June precipitation normal. June precipitation normal for Turkey is 16.4 mm, mean precipitation of June 2018 is 19.2 mm and the June 2017 is 9.00 mm. June precipitation was higher by 17% compared to July precipitation normal and by 100% compared to June 2017.



Figure 4. July 2018 Precipitation Anomalies

Temperature of August 2018

Mean temperature of August 2018 was 25.7°C, while long range mean temperature for August is 24.5°C. The lowest temperature was observed in Kangal as 3.8°C and the highest temperature was observed as 44.8°C in Cizre.



Figure 5. August 2018 Mean Temperature Anomalies

Precipitation of August 2018

Precipitation of August 2018 was higher than August precipitation normal and lower than previous year's. August precipitation normal is 13.8 mm, August 2017 mean precipitation is 17.2 mm and August 2018 mean precipitation is 15.8 mm. August 2018 precipitation was higher by 14% compared to normal and it was lower by 8% compared to last years's.



Figure 6. August 2018 Precipitation Anomalies

3. Verification of the SEECOF-19 climate outlook for 2018 summer season:

Mean temperature of summer for Turkey is 23,4°C according to 1981-2010 period. Mean temperature of summer 2018 was 24,6°C and it was 1,2°C higher than normal.

Summer 2018 precipitation was 85,7 mm while its normal is 61.0 mm. Precipitation of summer 2018 was 40% higher than normal.



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



Figure 9-10. 2018 Summer Season Mean Temperature and Precipitation Anomaly of Turkey

Country	Seasonal temperature JJA		Seasonal precipitation JJA		
	Observed	SEECOF-19 climate outlook for temperature	Observed	SEECOF-19 climate outlook for precipitation	High Impact Events
Turkey	Above normal	60% above normal, 30% normal, 10% below normal 50% above normal, 30% normal, 20% below normal(in the whole country except northeastern part)	40% higher than normal	 45% below normal, 35% around normal and 20% above normal (in the northern coast) 33% below normal, 34% normal and 33% above normal (in the whole country except the northern coast) 	In June 2018, hail caused damage in agricultural areas in Bursa, Aydın and Afyonkarahisar. Lightning damaged livestock in Bilecik during thunderstorm. In July 2018, frost caused agricultural damage in Burdur. Heavy rain caused difficulties transportation in İstanbul. In August 2018, in Isparta lightning damaged livestock. In Ordui 3 days of heavy rain caused landslide and one person heas lost his/her life.