**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 2017

#### 1. SEECOF-17 climate outlook for 2017 summer season:

In SEECOF-17 consensus statement, temperature was expected to around normal and above normal in the northern coast, above normal especially in the south western coast and also in the other parts of the country.

### Analysis of the 2017 summer season:

## **Temperature of June 2017**

In June 2017, mean temperatures were above normal Bandırma, Çanakkale, Edirne, İstanbul, Kırklareli, Kocaeli, Sakarya, Bodrum, Edremit, Marmaris, Fethiye, İskenderun, Manavgat, Silifke, Eskişehir, Akçakoca, Amasra, Düzce, Giresun, İnebolu, Zonguldak, Erzurum, Iğdır, Kars, Malatya, Adıyaman, Diyarbakır, Gaziantep and Şanlıurfa. In the other parts of the country temperatures were around normal. Long term average temperature of June is 21.5°C, while the average temperature of June 2017 has been 22.1°C. Lowest temperature was observed in Sarıkamış as 13.5°C, and the highest temperature was observed in Cizre as 31.0°C.

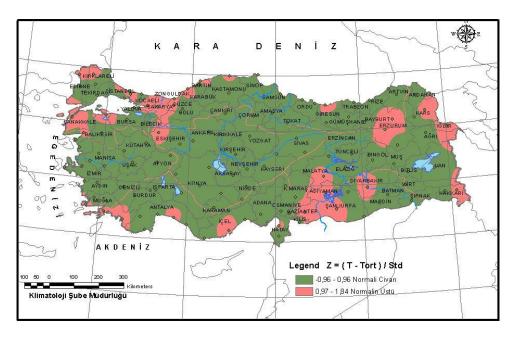


Figure 1. June-2017 Mean Temperature Anomalies

## **Precipitation of June 2017**

In June 2017, monthly precipitation value was above normal and it was also higher than last year's precipitation over Turkey except Eastern and Southeastern regions. Average precipitation of June 2017 is 35,0 mm, normal precipitation of June is 30,8 mm, and average precipitation of June 2016 is 33,7 mm. Precipitation value was 13,6% higher comparing to precipitation normal and 3,9% higher comparing to last year's precipitation.

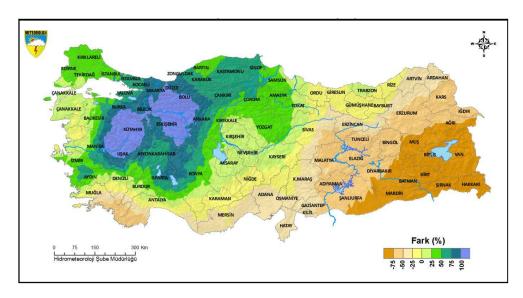


Figure 2. June-2017 Precipitation Anomalies

### **Temperature of July 2017**

Temperature values were around normal mostly in the northwestern and north central regions, and also in Akşehir, Karaman, Bitlis, Tunceli, Batman Ceylanpınar and Siverek. In other regions temperatures were above normal. Long term July average temperature is 24.6°C, and July 2017 average temperature is 26.0°C. Lowest observed tempeature was in Sarıkamış as17.6°C, and the highest temperature was observed in Cizre as 36.0°C.

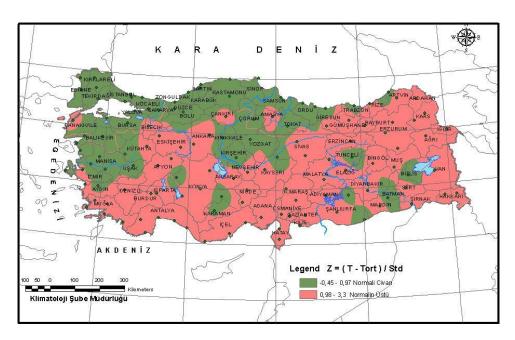


Figure 3. July-2017 Mean Temperature Anomalies

### **Precipitation of July 2017**

Monthly precipitation value was below normal and it was also lower than July 2017 precipitation over Turkey except northwestern region. In a large part of the northwestern region there was an increase that was more than 100%, while in a large part of the country the values decreased more than 75%. Average precipitation value of July 2017 is 9,0 mm, June precipitation normal is 16,7 mm, and average precipitation of July 2016 is 16,7 mm. Monthly precipitation value of July 2017 was below normal comparing to normal and June 2016 precipitation.

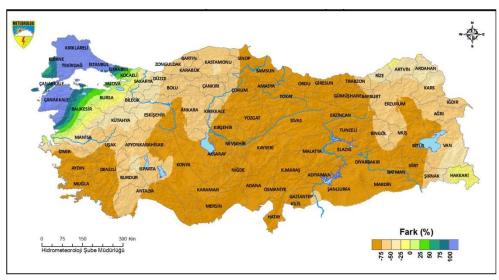


Figure 4. July-2017 Precipitation Anomalies

# **Temperature of August 2017**

Average temperature values in August 2017 was around normal in western regions and also in Bitlis, Tunceli, Adıyaman, Batman Ceylanpınar Kilis, Şanlıurfa and Siverek. In other regions, temperature values were above normal. Long term average temperature of August is 24.5°C and average temperature of August 2017 is 25.7°C. Lowest mean temperature was in Sarıkamış as 18.5°C, and the highest mean temperature was in Cizre as 35.1°C.

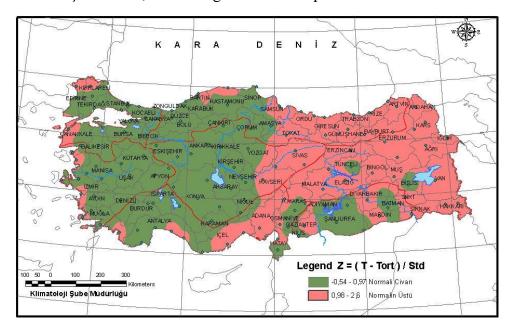


Figure 5. August-2017 Mean Temperature Anomalies

## **Precipitation of August 2017**

Over Turkey, monthly precipitation of August 2017 was above normal and it was also higher than the precipitation value of August 2016. Increased precipitation in the western regions was significant; more than 100% increase was observed in precipitation. In western coast and also in Tokat, Mardin, Diyarbakır and Gaziantep however, there was a decrease of 75% in precipitation. Precipitation average of August is 17,2 mm, precipitation normal of August is 13,9 mm and the average temperature of August 2017 is 18,0 mm. Precipitation of August 2017 was 23,7% higher than normal and 4,4% lower than last year's precipitation.

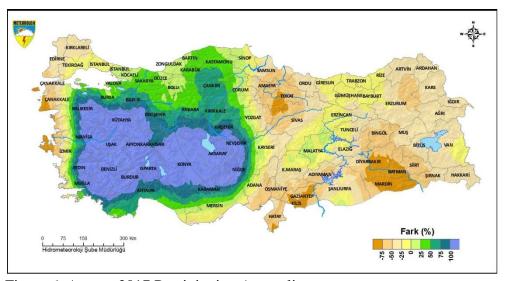


Figure 6. August-2017 Precipitation Anomalies

# 2. Verification of the SEECOF-17 climate outlook for 2017 summer season:

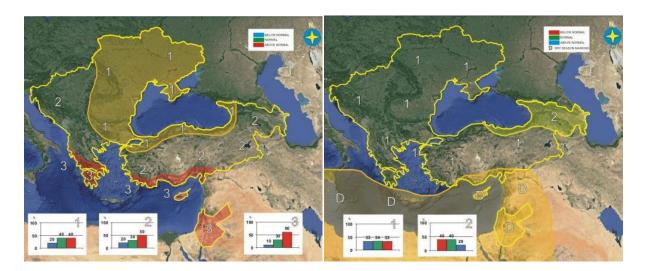


Figure 7-8. Graphical Presentation of 2017 Summer Season Temperature and Precipitation Outlook

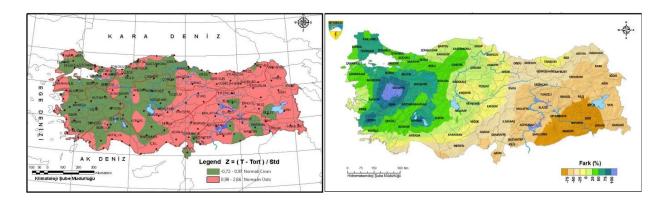


Figure 9-10. 2017 Summer Season Mean Temperature and Precipitation Anomaly of Turkey

Countr	Seasonal temperature  JJA		Seasonal precipitation JJA		
	Observed	SEECOF-	Observed	SEECOF-17 climate	High Impact Events
		17 climate		outlook for	
		outlook for		precipitation	
		temperature			
		20% below	Below		In <b>June</b> 2017, buildings were
Turkey		normal,	normal in		damaged, and transportation was
		40% around	the		affected due to heavy rain in Samsun,
	Around	normal,	eastern		Bolu, Zonguldak,
	normal	40% above	regions,		
	mostly in	normal(in	especiall	40% below normal,	In <b>July</b> 2017, agricultural areas in
	the west,	the north	y in	40% around normal,	Manisa, Çanakkale and Aydın were
	and	coastal	southeast	20% above normal	affected due to heavy precipitation.
	above	regions)			Buildings were damaged and
	normal in	10% below	Above	(in the northeastern	transportation was affected because
	the	normal,	normal in	coast, and southern	of heavy rain in Tekirdağ and
	eastern	30% around	the west.	coast except the	Istanbul. Heavy rain, hail and strong
	and	normal,	Around	southwestern	storm and flood also caused damages
	coastal	60% above	normal in	region)	on vehicles in Istanbul.
	regions.	normal	the		
		(in the south	central		In August 2017, agricultural areas
		western	regions.		were affected due to heavy rain in
		coast)			Aydın and Aksaray.