Climate Watch (Serial No.: 20230724–29)

Initial/Updated/Final

Topic: high temperature

Organization issuing

SEEVCCC

the statement:

Issued/ Amended /

24-7-2023 16:00 P.M.

Cancelled

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Valid from – to: 24-7-2023 – 30-9-2023 Next amendment: 31-7-2023

Region of concern: SEE

"Within the first week (24 to 30 July 2023), ECMWF monthly forecast predicts above average mean weekly air temperature with anomaly up to $+3^{\circ}$ C in Bulgaria, southern Greece, Cyprus and coastal areas of western and southern Turkey, with around 90% probability for exceeding upper tercile (top thirty percent of the highest temperature). Below average mean weekly air temperature with anomaly up to -3° C is predicted for northern Balkans, Ukraine and inland of Turkey with up to 70% probability for exceeding lower tercile. Precipitation deficit is expected in the eastern and southern Balkans and southern Turkey, with around 70% probability for lower tercile (bottom third of the lowest precipitation). Precipitation surplus is expected in Ukraine and northern Turkey, with probability around 80% for exceeding upper tercile (top third of the highest precipitation). "

Monitoring

During the period from 16 to 22 July 2023, weekly precipitation sums were up to 50 mm in some parts of central and northern Balkans, while in other parts of the region, precipitation totals were up to 25 mm. Precipitation was nor recorded in southern Balkans, Cyprus, Middle East and most of Turkey.

Outlook

Within the first week (24 to 30 July 2023), ECMWF monthly forecast predicts above average mean weekly air temperature with anomaly up to +3°C in Bulgaria, southern Greece, Cyprus and coastal areas of western and southern Turkey, with around 90% probability for exceeding upper tercile (top thirty percent of the highest temperature). Below average mean weekly air temperature with anomaly up to -3°C is predicted for northern Balkans, Ukraine and inland of Turkey with up to 70% probability for exceeding lower tercile. Precipitation deficit is expected in the eastern and southern Balkans and southern Turkey, with around 70% probability for lower tercile (bottom third of the lowest precipitation). Precipitation surplus is expected in Ukraine and northern Turkey, with probability around 80% for exceeding upper tercile (top third of the highest precipitation).

During the second week (31 July to 6 August 2023), above normal mean weekly air temperature with anomaly up to $+3^{\circ}$ C is forecasted in central and estern Turkey and parts of Middle East, with up to 80% probability for upper tercile (top thirty percent of the highest temperature). Below average mean weekly air temperature with anomaly up to -3° C is predicted for northern, western and central Balkans, as well as in Ukraine with up to 70% probability for exceeding lower tercile. Precipitation deficit is predicted for Turkey and South Caucasus, with probability up to 80% for exceeding lower tercile (bottom third of the lowest precipitation). Precipitation surplus is expected in the western Balkans, with probability of more than 60% for exceeding upper tercile.

During the following three months (July, August and September), seasonal forecast predicts above average seasonal air temperature in Romania, Moldova, Ukraine and most of the Balkans. Below average seasonal air temperature is expected in some parts of eastern and southeastern Turkey. Precipitation surplus is expected in the Carpathians, northeastern Turkey, South Caucasus and most of the Middle East. Precipitation deficit is predicted for Moldova, most of Ukraine, most of Turkey and most of the Balkans.

Update

An updated statement will be issued on 31-7-2023

For further information, please contact cws-seevccc@hidmet.gov.rs

ANNEX

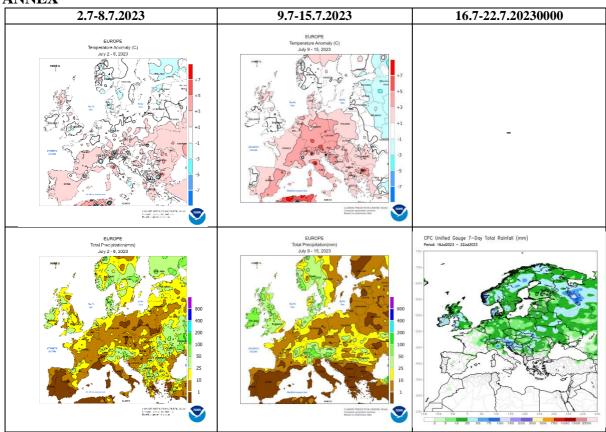


Figure 1. Temperature anomaly and total precipitation for recent weeks (source: Climate Prediction Center, USA)

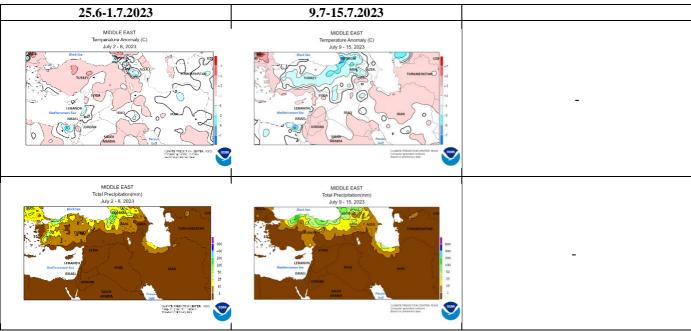


Figure 2. Temperature anomaly and total precipitation for recent weeks for Middle East (source: Climate Prediction Center)

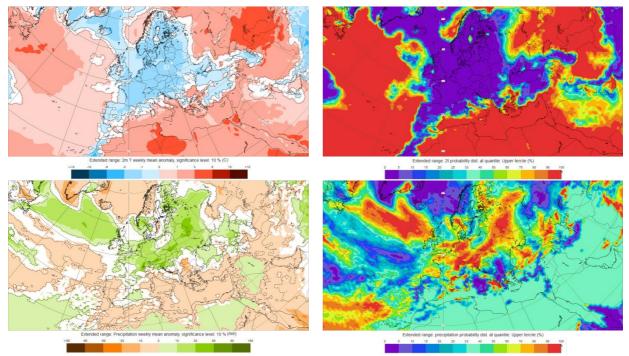


Figure 3. Outlook for the temperature anomalies and probability for the upper tercile (upper row), along with the precipitation surplus/deficit and probability for the upper tercile (lower row) for the 24.7–30.7.2023 period (source: European Centre for Medium-Range Weather Forecasts)

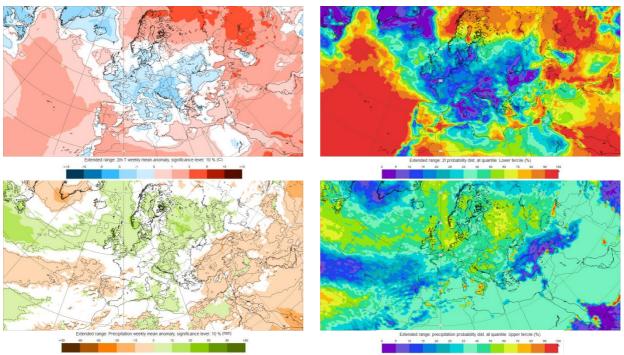


Figure 4. Outlook for the temperature anomalies and probability for the upper tercile (upper row), along with the precipitation surplus/deficit and probability for the upper tercile (lower row) for the 31.7–6.8.2023 period (source: European Centre for Medium-Range Weather Forecasts)

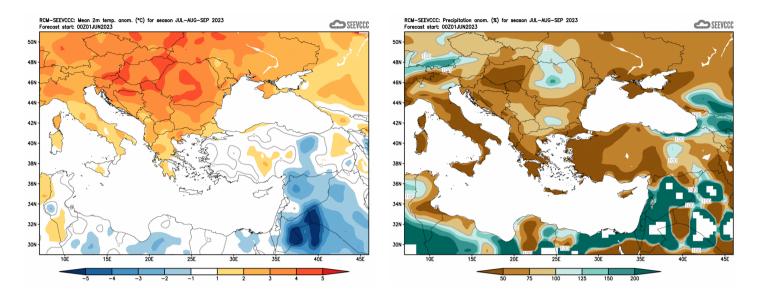


Figure 5. Mean seasonal temperature and precipitation anomaly for the season JAS (seasonal outlook from RCM – SEEVCCC)

Sources

- Republic Hydrometeorological Service of Serbia (<u>www.hidmet.gov.rs</u>)
- South East European Virtual Climate Change Center (<u>www.seevccc.rs</u>)
- European Centre for Medium-Range Weather Forecasts (http://www.ecmwf.int/)
- Climate Prediction Center USA (http://www.cpc.ncep.noaa.gov/)
- Deutscher Wetterdienst (http://www.dwd.de/)