Climate Watch (Serial No.: 20241216–51)

Initial/Updated/Final

Topic: temperature and precipitation

Organization issuing

the statement: SEEVCCC

Issued/ Amended /

16-12-2024 16:00

Cancelled

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Valid from – to: 16-12-2024 – 31-3-2025 Next amendment: 23-12-2024

Region of concern: Ukraine, Georgia, Turkey and Middle East

"Within the first week (16 to 22 December 2024), ECMWF monthly forecast predicts below normal mean weekly air temperature, with anomaly up to $-3\,^{\circ}$ C in central and eastern Turkey, Georgia and Middle East. Probability for exceeding lower tercile is up to 90%. Precipitation surplus is expected in western Ukraine, central and southern Turkey and Georgia, with around 80% probability for exceeding upper tercile, and up to 90% in western Ukraine. "

Monitoring

During the period from 8 to 14 December 2024, weekly precipitation sums up to 100 mm were observed along the Adriatic and Ionian Sea, western and northeastern Turkey and Georgia, up to 50 mm in eastern Balkans, eastern Romania, northern Moldova and central Ukraine, while rest of the region received less than 25 mm of precipitation.

Outlook

Within the first week (16 to 22 December 2024), ECMWF monthly forecast predicts above normal mean weekly air temperature, with anomaly up to +6 °C in the Pannonian Plain, most of Romania, Moldova and Ukraine. Probability for exceeding upper tercile (top third of the highest temperature) is up to 90%. Below normal mean weekly air temperature, with anomaly up to -3 °C is expected in central and eastern Turkey, Georgia and Middle East. Probability for exceeding lower tercile (bottom third of the lowest temperature) is up to 90%. Precipitation surplus is expected in western Ukraine, central and southern Turkey and Georgia, with around 80% probability for exceeding upper tercile (upper third of the highest precipitation), and up to 90% in western Ukraine. Precipitation deficit is expected in the southern Balkans, southeastern Turkey, Armenia, Azerbaijan, and Lebanon. Probability for exceeding lower tercile (bottom third of the lowest precipitation) is around 90%.

During the second week (23 to 29 December 2024), above average mean weekly air temperature, with anomaly up to +3 °C, is forecasted for eastern Turkey, Armenia, Azerbaijan and Middle East, with up to 90% probability for exceeding upper tercile (top third of the highest temperature). Below normal mean weekly air temperature, with anomaly up to -3 °C is expected along the Adriatic Sea coast, with around 50% probability for exceeding lower tercile (bottom third of the lowest temperature). Precipitation surplus is predicted for Aegean Sea and western Turkey, with around 50% probability for exceeding upper tercile (upper third of the highest precipitation).

During the following three months (January, February and March), seasonal forecast predicts above average seasonal air temperature in most of the SEECOF region, beside northeastern Turkey and some parts of South Caucasus. Precipitation surplus is expected in Azerbaijan, while deficit is forecasted for southeastern Turkey and Middle East.

Update

An updated statement will be issued on 23-12-2024

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

ANNEX

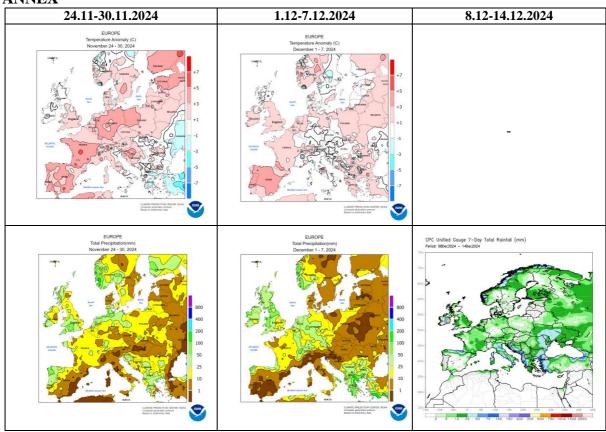


Figure 1. Temperature anomaly and total precipitation for recent weeks (source: Climate Prediction Center, USA)

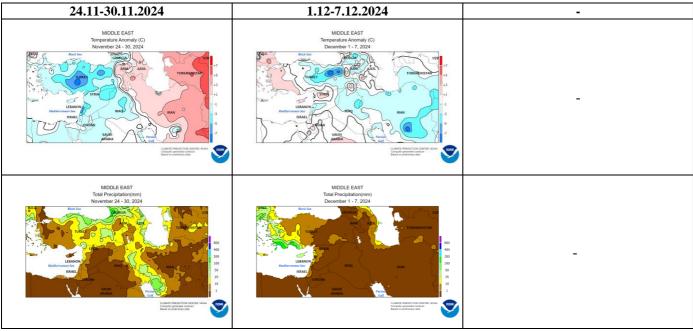


Figure 2. Temperature anomaly and total precipitation for recent weeks for Middle East (source: Climate Prediction Center)

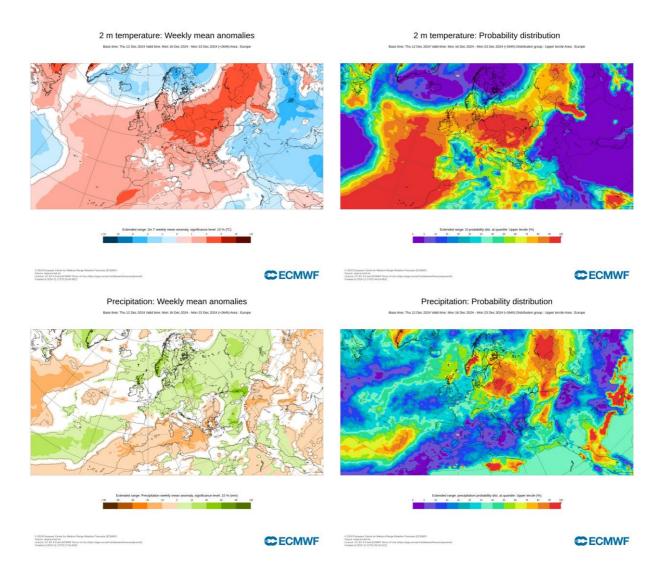


Figure 3. Outlook for the temperature anomalies and probability for the upper tercile (upper row), along with the precipitation surplus/deficit and probability for the upper tercile (lower row) for the 16.12–22.12.2024 period (source: European Centre for Medium-Range Weather Forecasts, ECMWF)

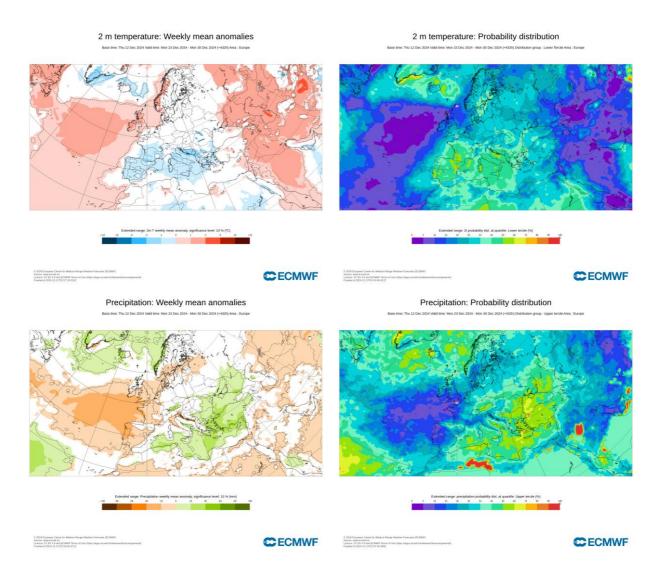


Figure 4. Outlook for the temperature anomalies and probability for the lower tercile (upper row), along with the precipitation surplus/deficit and probability for the upper tercile (lower row) for the 23.12–29.12.2024 period (source: ECMWF)

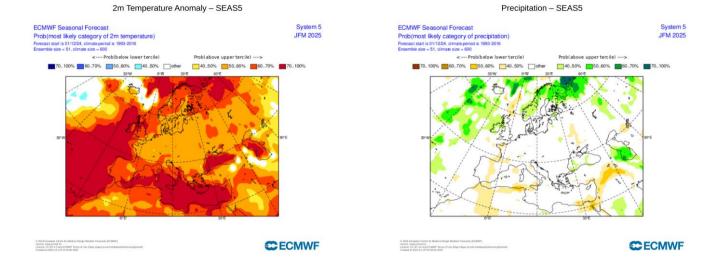


Figure 5. Mean seasonal air temperature and precipitation anomaly probabilities for the season JFM (source: ECMWF)

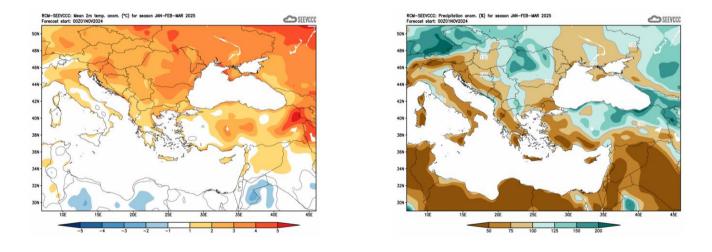


Figure 6. Mean seasonal temperature and precipitation anomaly for the season DJF (seasonal outlook from RCM – SEEVCCC)

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)