

Climate Watch (Serial No.: 20241111–46)

Initial/Updated/Final

Topic: **temperature**
Organization issuing
the statement: SEEVCCC

Issued/ Amended /
Cancelled 11-11-2024 16:00

Contact: E-mail: cws-seevccc@hidmet.gov.rs
Phone: +381112066925
Fax: +381112066929

Valid from – to: 11-11-2024 – 31-1-2025 Next amendment: 18-11-2024

Region of concern: **Bulgaria, Romania and Serbia**

„Within the first week (11 to 17 November 2024), ECMWF monthly forecast predicts below normal mean weekly air temperature, with anomaly up to -3°C in most of the Balkans, Ukraine, Moldova, Georgia and parts of northeastern and western Romania, while in the rest of Romania, most of Bulgaria, as well as northern and southern Serbia temperature anomaly is expected to be up to -6°C . Probability for exceeding lower tercile (bottom third of the lowest temperature) is in a range from around 80% in Georgia up to more than 90% in the rest of the observed area. “

Monitoring

During the period from 3 to 9 November 2024, in most of the region there were no precipitation, while weekly precipitation sums around 25 mm were registered in Cyprus, western Georgia, southeastern and northeastern Turkey, while in some locations in western Georgia they were up to 50 and in northeastern Turkey even up to 100 mm.

Outlook

Within the first week (11 to 17 November 2024), ECMWF monthly forecast predicts below normal mean weekly air temperature, with anomaly up to -3 °C in most of the Balkans, Ukraine, Moldova, Georgia and parts of northeastern and western Romania, while in the rest of Romania, most of Bulgaria, as well as northern and southern Serbia temperature anomaly is expected to be up to -6 °C. Probability for exceeding lower tercile (bottom third of the lowest temperature) is in a range from around 80% in Georgia up to more than 90% in the rest of the observed area. Precipitation deficit is predicted for the western Balkans, with around 70% probability for exceeding lower tercile (bottom third of the lowest precipitation). Precipitation surplus is predicted for the southern and eastern Balkans, as well as eastern Turkey, with probability for exceeding upper tercile (upper third of the highest precipitation) around 80% in Turkey and around 90% in the Balkans.

During the second week (18 to 24 November 2024), above average mean weekly air temperature, with anomaly up to $+3$ °C, is forecasted for most of the Balkans, Moldova, most of Ukraine and most of Romania, with around 60% probability for exceeding upper tercile (upper third of the highest temperature), in the southern Balkans around 80%. In eastern Ukraine temperature anomaly is expected to be up to $+6$ °C, with up to 80% probability for exceeding upper tercile. Precipitation surplus is predicted for most of the Balkans, western Romania and northern Ukraine, with probability for exceeding upper tercile (upper third of the highest precipitation) around 70%.

During the following three months (November, December and January), seasonal forecast predicts above average seasonal air temperature in most of the Balkans, Cyprus, Turkey, South Caucasus and Middle East. Precipitation surplus is expected in the southern Aegean Sea and northeastern coastal part of Turkey. Precipitation deficit is forecasted for parts of Pannonian Plain, Cyprus, southeastern Turkey and Middle East.

Update

An updated statement will be issued on 18-11-2024

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

ANNEX

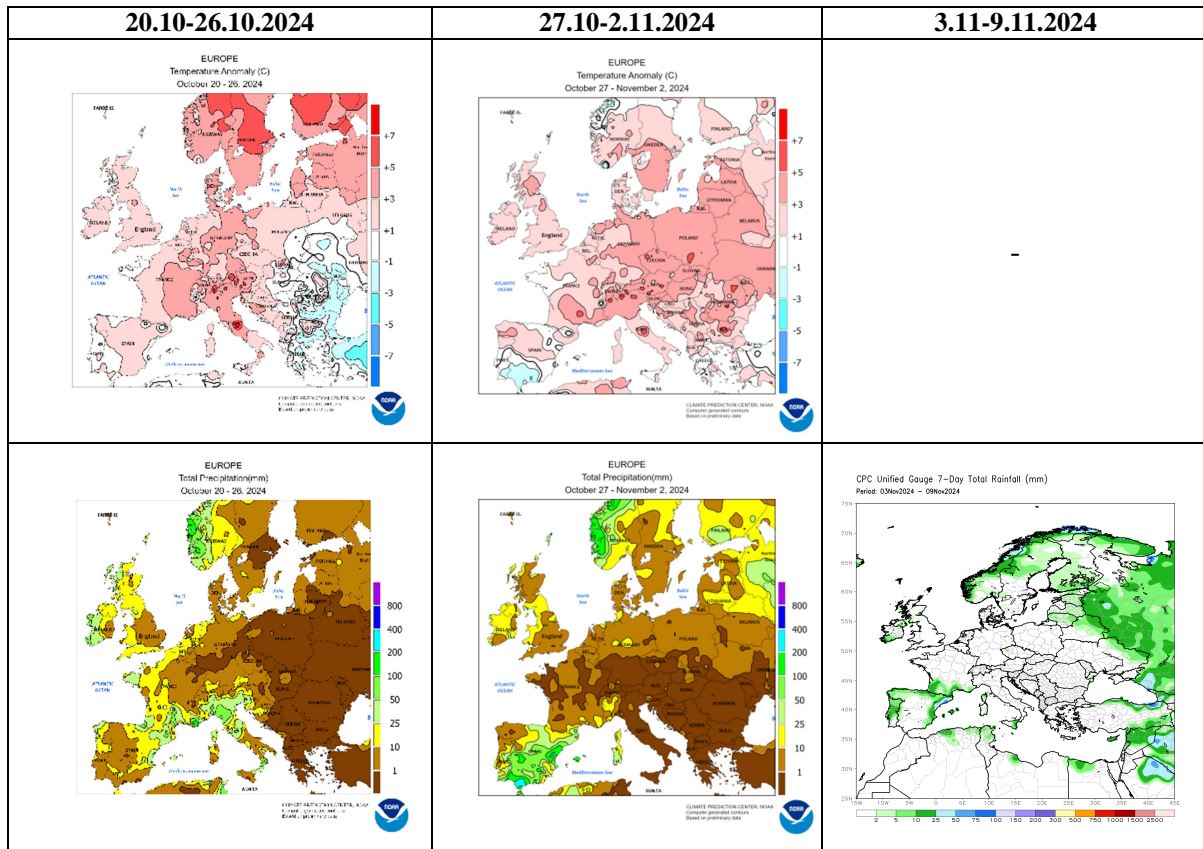


Figure 1. Temperature anomaly and total precipitation for recent weeks (source: Climate Prediction Center, USA)

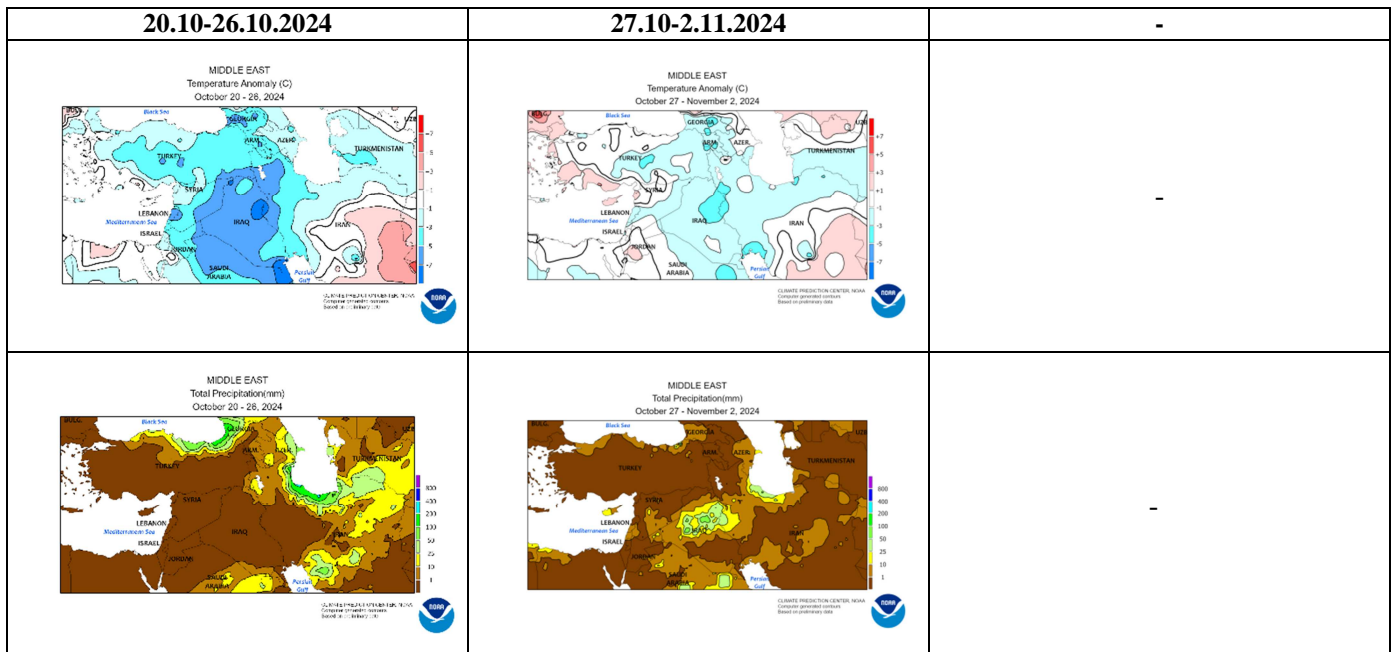
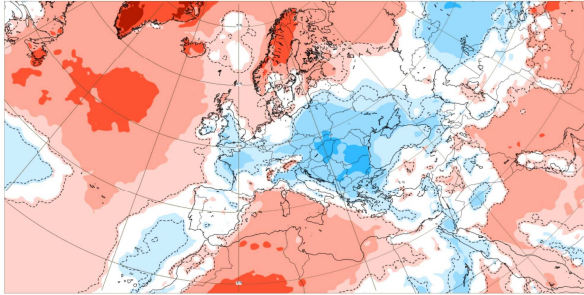


Figure 2. Temperature anomaly and total precipitation for recent weeks for Middle East (source: Climate Prediction Center)

2 m temperature: Weekly mean anomalies

Base time: Sun 10 Nov 2024 Valid time: Mon 11 Nov 2024 - Mon 18 Nov 2024 (+192h) Area : Europe



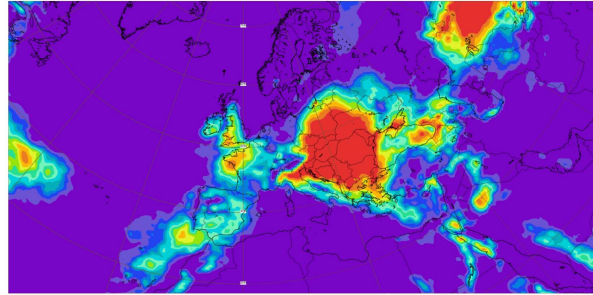
Extended range: 2m T weekly mean anomaly, significance level: 10 % (°C)

© 2024 European Centre for Medium-Range Weather Forecasts (ECMWF)
Source: reanalysis data
License: CC BY 4.0 and ECMWF Terms of Use (https://www.ecmwf.int/en/forecasts/faq)
Created at 2024-11-10T20:31:02+00:00



2 m temperature: Probability distribution

Base time: Sun 10 Nov 2024 Valid time: Mon 11 Nov 2024 - Mon 18 Nov 2024 (+192h) Distribution group: Lower Tercile Area : Europe



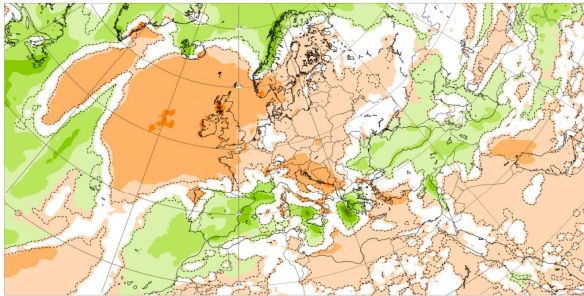
Extended range: 2m probability dist. at quantile: Lower tercile (%)

© 2024 European Centre for Medium-Range Weather Forecasts (ECMWF)
Source: reanalysis data
License: CC BY 4.0 and ECMWF Terms of Use (https://www.ecmwf.int/en/forecasts/faq)
Created at 2024-11-11T01:20:07+01:00



Precipitation: Weekly mean anomalies

Base time: Sun 10 Nov 2024 Valid time: Mon 11 Nov 2024 - Mon 18 Nov 2024 (+192h) Area : Europe



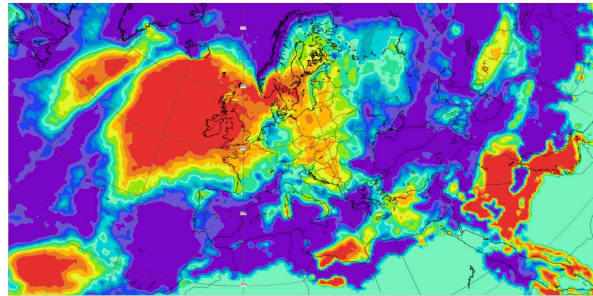
Extended range: Precipitation weekly mean anomaly, significance level: 10 % (mm)

© 2024 European Centre for Medium-Range Weather Forecasts (ECMWF)
Source: reanalysis data
License: CC BY 4.0 and ECMWF Terms of Use (https://www.ecmwf.int/en/forecasts/faq)
Created at 2024-11-10T20:31:02+00:00



Precipitation: Probability distribution

Base time: Sun 10 Nov 2024 Valid time: Mon 11 Nov 2024 - Mon 18 Nov 2024 (+192h) Distribution group: Lower Tercile Area : Europe



Extended range: precipitation probability dist. at quantile: Lower tercile (%)

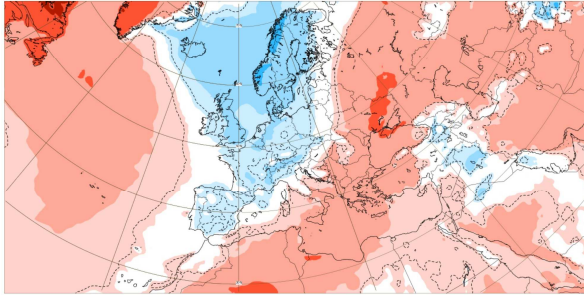
© 2024 European Centre for Medium-Range Weather Forecasts (ECMWF)
Source: reanalysis data
License: CC BY 4.0 and ECMWF Terms of Use (https://www.ecmwf.int/en/forecasts/faq)
Created at 2024-11-11T01:20:07+01:00



Figure 3. Outlook for the temperature anomalies and probability for the lower tercile (upper row), along with the precipitation surplus/deficit and probability for the lower tercile (lower row) for the 11.11–17.11.2024 period (source: European Centre for Medium-Range Weather Forecasts, ECMWF)

2 m temperature: Weekly mean anomalies

Base time: Sun 10 Nov 2024 Valid time: Mon 18 Nov 2024 - Mon 25 Nov 2024 (+3600) Area : Europe



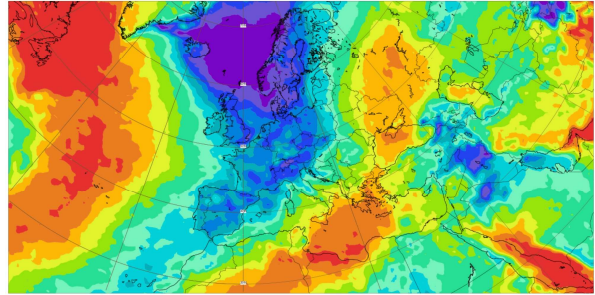
Extended range: 2m T weekly mean anomaly, significance level: 10 % (°C)

© 2024 European Centre for Medium-Range Weather Forecasts (ECMWF)
Service: operational
Dataset: EC-EV4.0 and EC-MAR5. Source of Use: <https://apps.ecmwf.int/datasets/access/operational/>
Created at 2024-11-10T09:13:27.622Z



2 m temperature: Probability distribution

Base time: Sun 10 Nov 2024 Valid time: Mon 18 Nov 2024 - Mon 25 Nov 2024 (+3600) Distribution group : Upper tercile Area : Europe



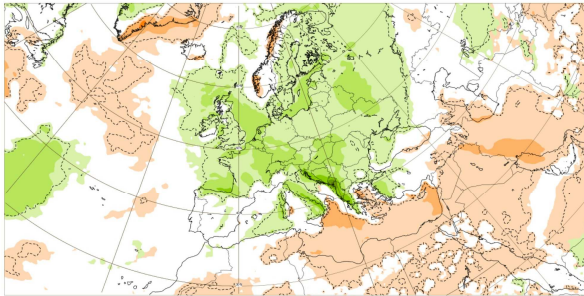
Extended range: 2m probability dist. at quantile: Upper tercile (%)

© 2024 European Centre for Medium-Range Weather Forecasts (ECMWF)
Service: operational
Dataset: EC-EV4.0 and EC-MAR5. Source of Use: <https://apps.ecmwf.int/datasets/access/operational/>
Created at 2024-11-10T09:13:27.622Z



Precipitation: Weekly mean anomalies

Base time: Sun 10 Nov 2024 Valid time: Mon 18 Nov 2024 - Mon 25 Nov 2024 (+3600) Area : Europe



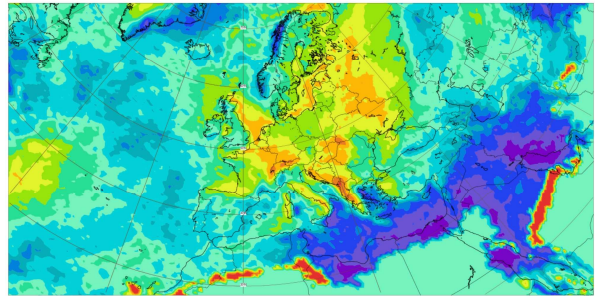
Extended range: Precipitation weekly mean anomaly, significance level: 10 % (mm)

© 2024 European Centre for Medium-Range Weather Forecasts (ECMWF)
Service: operational
Dataset: EC-EV4.0 and EC-MAR5. Source of Use: <https://apps.ecmwf.int/datasets/access/operational/>
Created at 2024-11-10T09:13:27.622Z



Precipitation: Probability distribution

Base time: Sun 10 Nov 2024 Valid time: Mon 18 Nov 2024 - Mon 25 Nov 2024 (+3600) Distribution group : Upper tercile Area : Europe



Extended range: precipitation probability dist. at quantile: Upper tercile (%)

© 2024 European Centre for Medium-Range Weather Forecasts (ECMWF)
Service: operational
Dataset: EC-EV4.0 and EC-MAR5. Source of Use: <https://apps.ecmwf.int/datasets/access/operational/>
Created at 2024-11-10T09:13:27.622Z



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 18.11–24.11.2024 period (source: ECMWF)

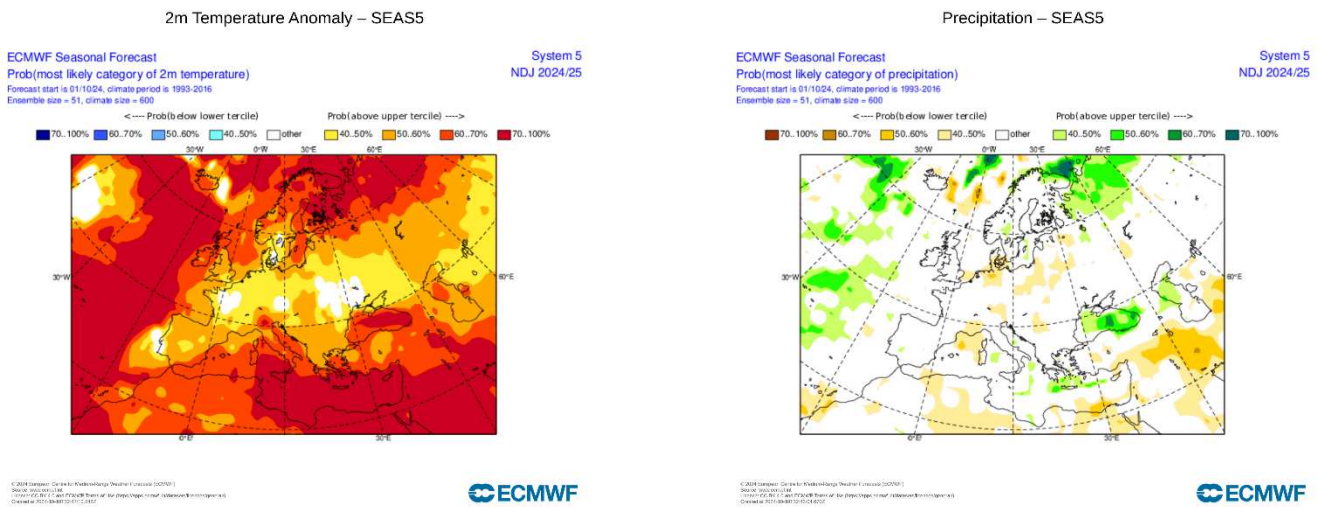


Figure 5. Mean seasonal air temperature and precipitation anomaly probabilities for the season NDJ (source: ECMWF)

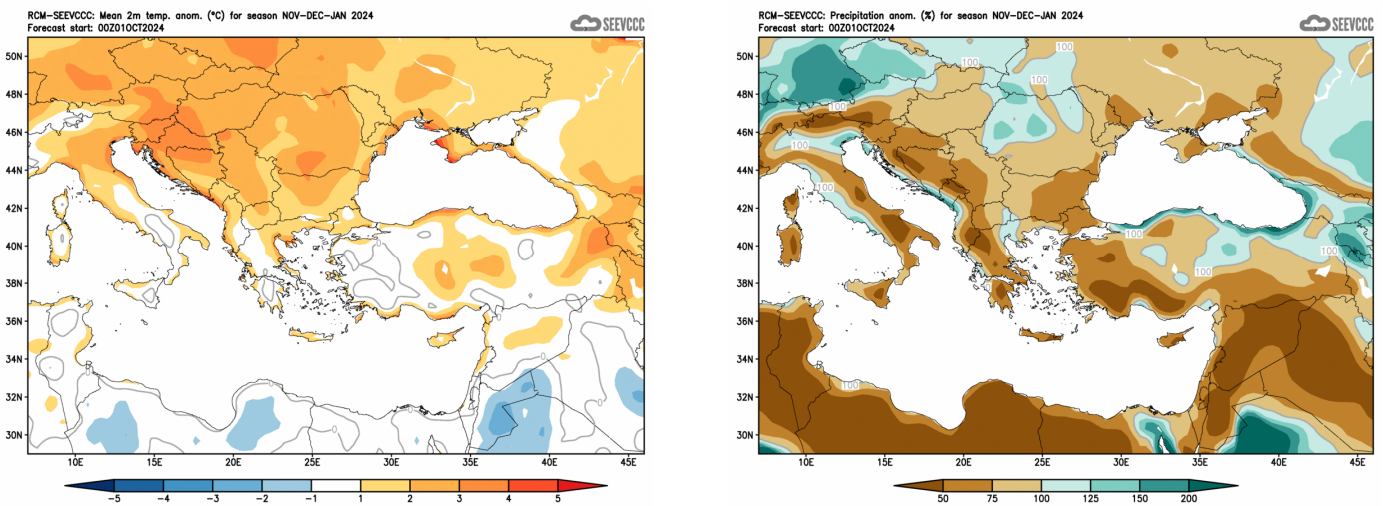


Figure 6. Mean seasonal temperature and precipitation anomaly for the season NDJ (seasonal outlook from RCM – SEEVCCC)

Sources

- Republic Hydrometeorological Service of Serbia (www.hidmet.gov.rs)
- South East European Virtual Climate Change Center (www.seevccc.rs)
- 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>)