



**Twenty-third Session of  
SOUTHEASTERN EUROPE CLIMATE OUTLOOK FORUM (SEECOF-23)  
April-May, 2020**

**SEASONAL OUTLOOK FOR SUMMER SEASON 2020 FOR THE SOUTH  
EASTERN EUROPE AND CAUCASUS REGION (SEE&C)**

Climate experts from WMO RA VI RCC Network Nodes on long-range forecasting (Meteo France, France and Roshydromet, Russia) and WMO RA VI RCC Network Node on climate monitoring (Deutscher Wetterdienst, Germany), UK Met-Office, Global Producing Centre ECMWF, International Research Institute for Climate and Society (IRI, USA), National Centers for Environmental Prediction (NCEP, USA), WMO RA VI RCC South East Europe Virtual Climate Change Centre (SEEVCCC, Serbia) and National Hydrometeorological Services of SEECOF region provided their valuable contribution to the successful implementation of SEECOF-23 by developing the relevant documents and providing scientific guidance and recommendations.

The SEECOF-23 comprised of the following Steps:

- Step 1: qualitative verification of the SEECOF-22 climate outlook for 2019-2020 Winter;
- Step 2: assessment of the current state of the climate including large-scale climate patterns worldwide and assessments of its likely evolution in the course of the next months;
- Step 3: building the consensus forecast for 2020 summer season.

All relevant documentation is posted and updated in SEEVCCC web site: <http://www.seevccc.rs>

Observed sea surface temperature along the most of the Tropical Pacific is currently slightly above normal (neutral El Nino conditions), with higher anomalies over the western part of the basin. Cold anomalies in subsurface suggest that development of La Nina event is starting, which is supported by most of the models. However, the majority of them still predict normal conditions during period June-August 2020. Indian Ocean Dipole is currently neutral, but it is forecasted to become negative during summer.

Atmospheric response is consistent over tropics, but less clear over North Atlantic and Europe, with differences among models. In general terms, they seem to favour higher pressures over Central and Southern Europe, and more intense westerlies over Northern Europe.

Some parts of Central Europe and the Balkan Peninsula have experienced significant drought over the last few months, with soil moisture below normal In May. In case of anticyclonic situations, a dry soil can enhance risk of the onset of heat waves.

## SEECOF-23 CLIMATE OUTLOOK FOR THE 2020 SUMMER SEASON

Similarly, to MedCOF-14 seasonal climate outlook, SEECOF-23 prediction is based on the output from dynamical models, including, inter alia, the operational products of the SEEVCCC centre, statistical models and teleconnections of large-scale climate features.

The maps show the probabilistic consensus forecast for the tercile categories of anomalies for seasonal mean temperature and precipitation, relative to the 1981-2010 period. Due to the climate warming trend, anomalies are affected by the selected reference period.

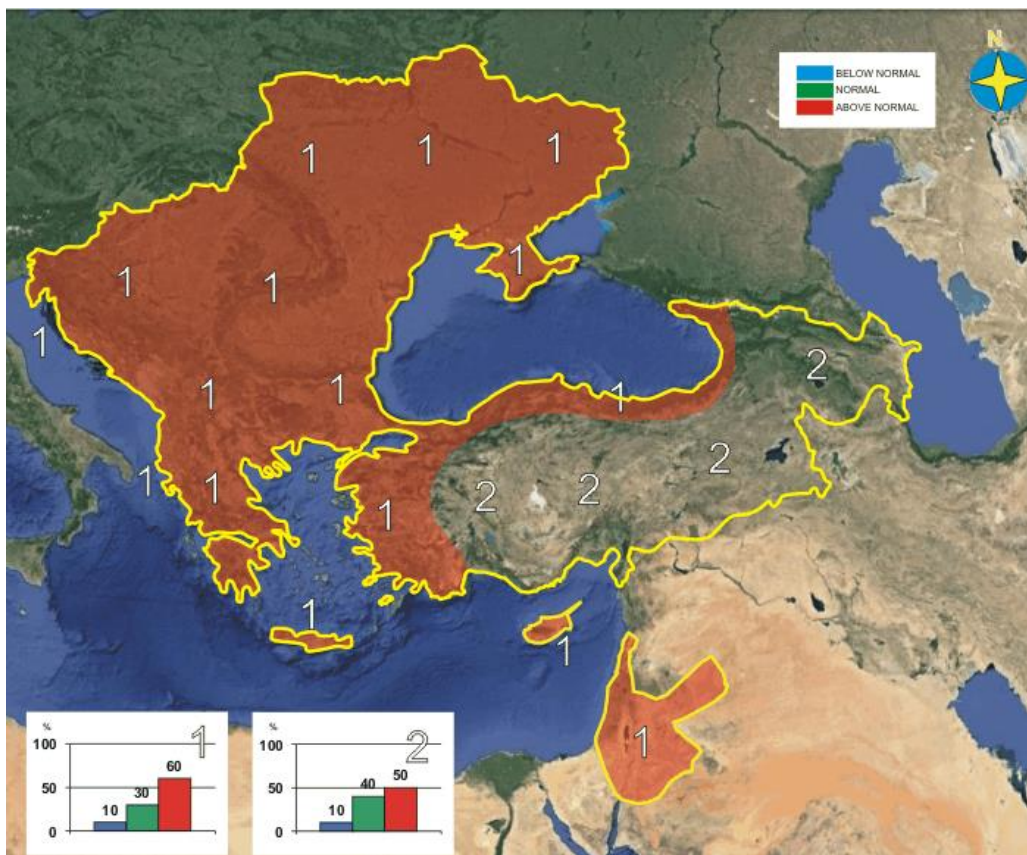


Figure 1. Graphical presentation of the 2020 summer temperature outlook

Probability for the above-average summer temperature is decreasing across the SEECOF region from northern-northeastern toward southeastern parts.

In most of the SEECOF region, there is high probability for above-average summer temperature (zone 1 in Figure 1) relative to the continental parts of Turkey and South Caucasus region (zone 2 in Figure 1). The generalized relatively high warm signal is probably partly due to the background climatic warming trend.

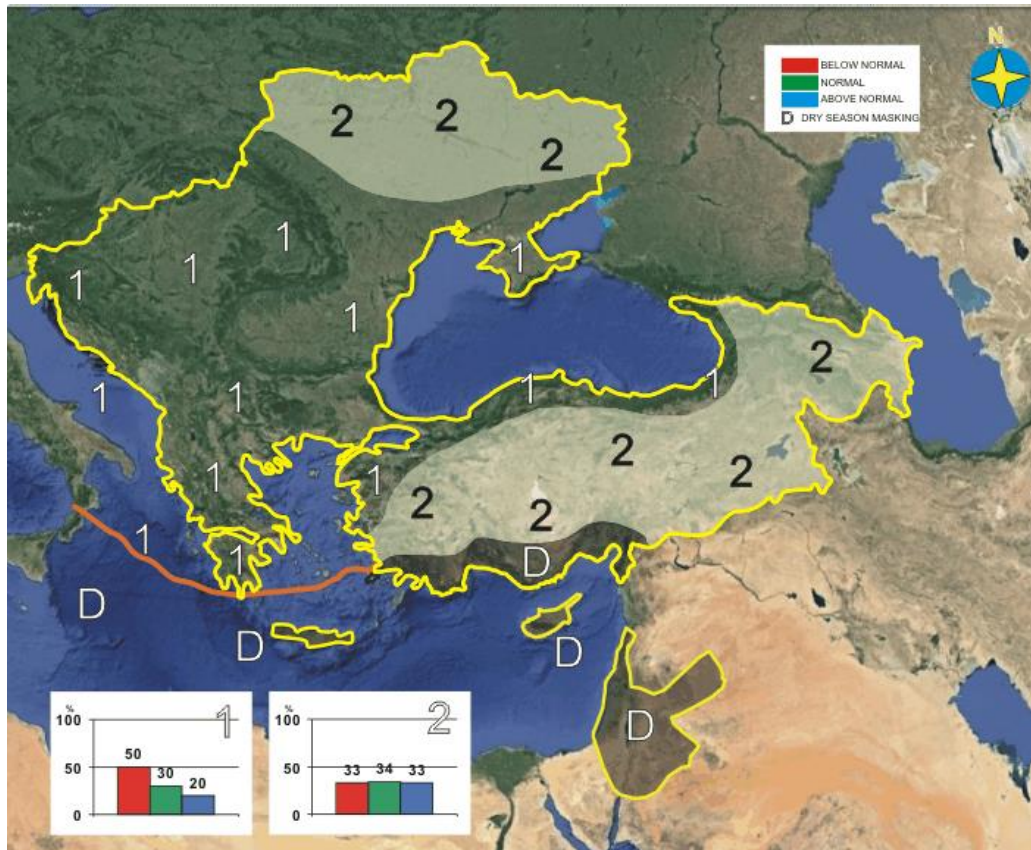


Figure 2. Graphical presentation of the 2020 summer precipitation outlook

Uncertainties in regional predictions are higher for precipitation than for temperature.

The uncertainty is high for most of the South Caucasus region, continental parts of Turkey and northern parts of Ukraine (zone 2 in Figure 2) – with approximately equal probabilities for below-, near- or above normal-averages of summer precipitation sums. In contrast, most of the SEECOF region is likely to experience a precipitation deficit (zone 1 in Figure 2).

It should be noted that certain parts of the country, particularly mountain regions may observe near- or above- normal summer precipitation due to the episodes of enhanced convection accompanied by heavy precipitation. Due to dry season masking, it is not possible to forecast summer precipitation totals for the Eastern Mediterranean with belonging coasts and hinterland, Crete as well as Israel and Jordan.

#### Reference:

The maps show the probabilistic consensus forecast for tercile categories of anomalies of seasonal-mean temperature and precipitation, relative to the 1981-2010 period.

Any further advice on the forecast signals, shorter-range updates and warnings will be available throughout the summer from the National Meteorological Services, along with the details on the methodology and skill of long-range predictions.

*\* The graphical representation of climate outlook in this statement is for guidance purposes only, and does not imply any opinion whatsoever concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.*

## **APPENDIX A: Contributors to SEECOF-23**

- World Meteorological Organization
- Met Office, United Kingdom
- International Research Institute for Climate and Society, United States of America
- European Center for Medium Range Weather Forecast
- Météo France, Republic of France
- Deutscher Wetterdienst, Federal Republic of Germany
- National Center for Environmental Prediction, United States of America
- Federal Service for Hydrometeorology and Environmental Monitoring, Russian Federation
- South East European Virtual Climate Change Center hosted by Republic Hydrometeorological Service of Serbia, Republic of Serbia
- Aemet, Spain - as a moderator of the MedCOF (Mediterranean Climate Outlook Forum)
- Institute of Geosciences, Energy, Water and Environment, Albania
- Armenian State Hydrometeorological and Monitoring Service, Armenia
- National Institute of Meteorology and Hydrology, Republic of Bulgaria
- Meteorological and Hydrological Service, Republic of Croatia
- Meteorological Service, Republic of Cyprus
- Hellenic National Meteorological Service, Greece
- The National Environmental Agency of Georgia, Georgia
- Hungarian Meteorological Service, Hungary
- Israel Meteorological Service, State of Israel
- Republic Hydrometeorological Institute, Former Yugoslav Republic of Macedonia
- State Hydrometeorological Service, Republic of Moldova
- Hydrometeorological Institute of Montenegro, Montenegro
- National Meteorological Administration, Romania
- Federal Hydrometeorological Service of the Federation of Bosnia and Herzegovina, Federation of Bosnia and Herzegovina, Bosnia and Herzegovina
- Republic Hydrometeorological Service of the Republic of Srpska, Republic of Srpska, Bosnia and Herzegovina
- Republic Hydrometeorological Service of Serbia, Republic of Serbia
- Turkish State Meteorological Service, Republic of Turkey
- Ukrainian Hydrometeorological Center, Ukraine