



**Fifteenth Session of  
SOUTHEASTERN EUROPE CLIMATE OUTLOOK FORUM (SEECOF-15)  
April-May, 2016**

**SEASONAL OUTLOOK FOR SUMMER SEASON 2016 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-15 by developing the relevant documents and providing scientific guidance and recommendations.

The SEECOF-15 comprised of the following Steps:

- Step 1: qualitative verification of the SEECOF-14 climate outlook for 2015-2016 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 2016 summer season.

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

## SEECOF-15 CLIMATE OUTLOOK FOR THE 2016 SUMMER SEASON

As well as, the MedCOF-6 seasonal climate outlook, SEECOF-15 prediction is based on the output from dynamical models, including, inter alia, the operational products of the SEEVCCC centre, statistical models and known teleconnections of large-scale climate features.

The past strong El Niño event is still present, but rapidly weakening. Models and expert opinion suggest that la Niña threshold (3.4 box) could be reached by the end of June. Over north Pacific, positive PDO is still present, whereas over south Pacific, SST warm anomalies should prevail. Warmer than normal SST will continue over the Indian Ocean with the IOD becoming negative. Over the North-Atlantic, models tend to maintain SST cold anomalies for the summer season.

The large spread in the GPC forecasts in terms of geopotential height anomalies and the absence of consistent signal over most of North Atlantic and Europe/North Africa suggests high uncertainty in the forecasting systems' prediction of large-scale atmospheric circulation over the European /North African sector during the summer.

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

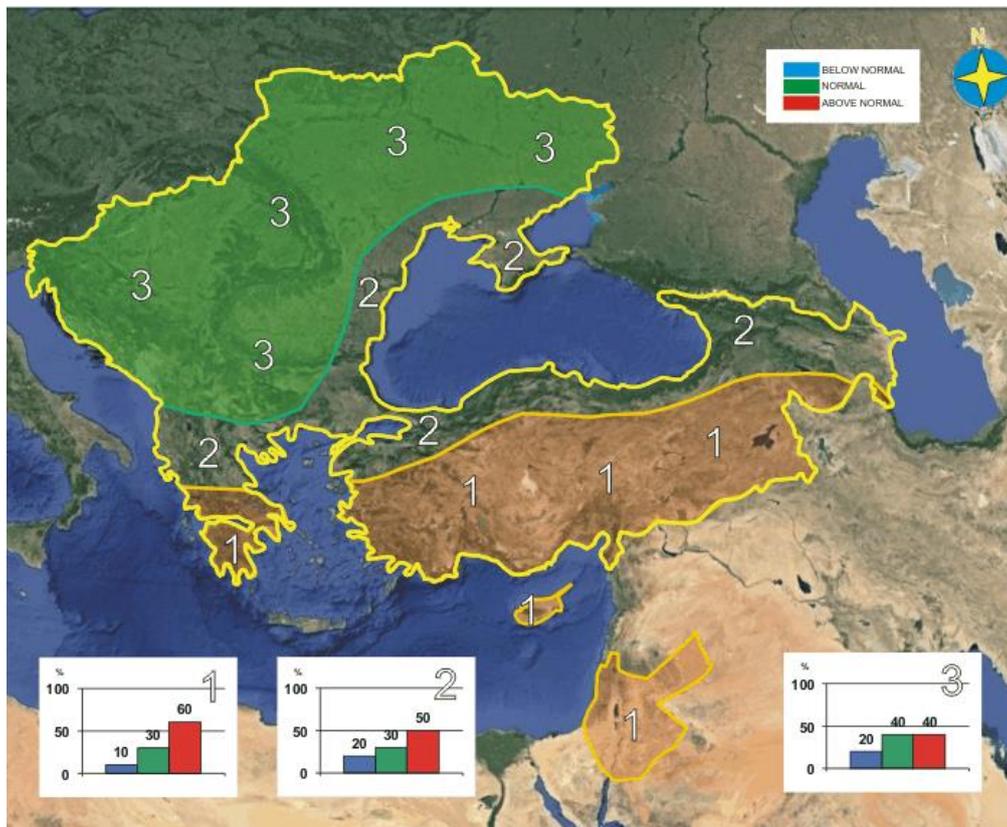


Figure 1. Graphical presentation of the 2016 summer temperature outlook

Predicted East Atlantic like circulation will lead to an enhanced probability of positive anomalies of the summer temperature in the SEECOF region. The probability for above-average summer temperature is increasing across the areas spanning from the western and northwestern, towards the eastern and southeastern parts of the SEECOF region. There is lower probability for exceeding the

average summer temperature in the south of Ukraine, along the coasts of the Black Sea, northern Greece and the South Caucasus region (zone 2 in Figure 1), while there is higher probability for above-average conditions in the south of Greece, most of Turkey, Eastern Mediterranean, Israel and Jordan (zone 1 in Figure 1). Most of Ukraine, the Pannonian Plain and most of the Balkan Peninsula are likely to experience above- or near-normal summer temperatures (zone 3 in Figure 1). There is a moderate probability for the onset of heat waves in the southern and eastern parts of the SEECOF region.

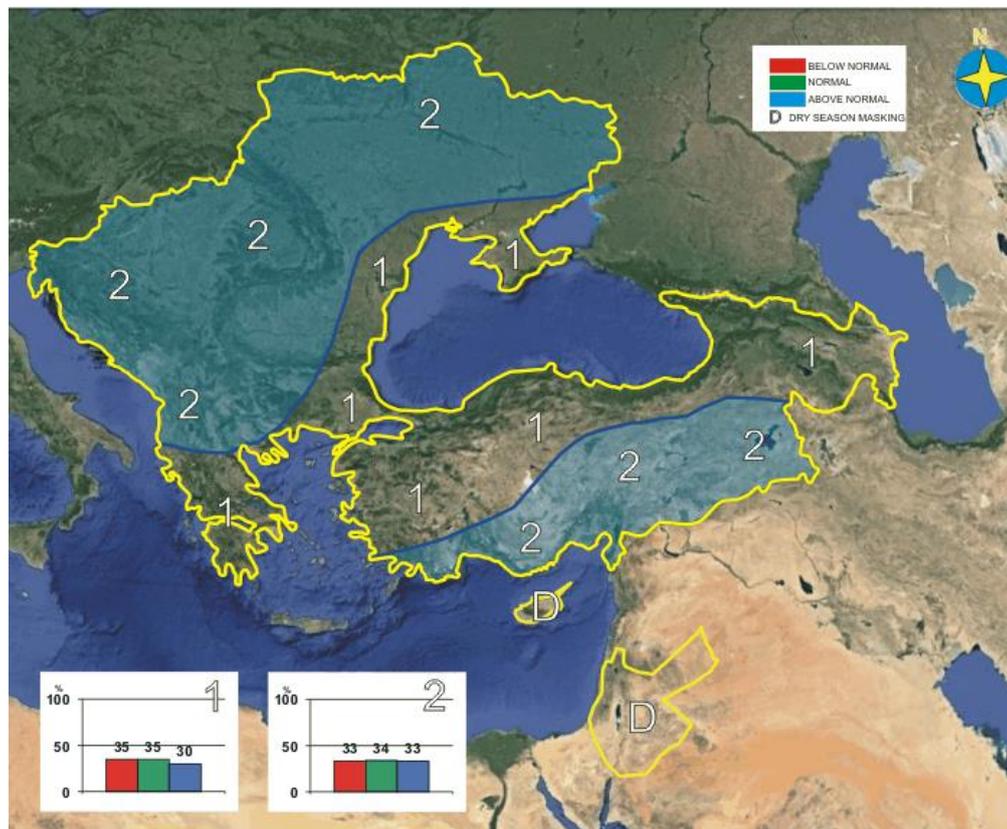


Figure 2. Graphical presentation of the 2016 summer precipitation outlook

Uncertainties in regional predictions are higher for precipitation than for temperature. Summer precipitation totals are likely to be near- or below average in the Caucasus region, south Balkans, coasts of the Black Sea with its hinterland and western part of Turkey, as well as in the south of Ukraine (zone 1 in Figure 2). The uncertainty is large in the remainder of the SEECOF region (zone 2 in Figure 2): probabilities for below-, near- or above- average conditions are approximately equal. It should be noted that certain parts of the country, particularly mountain regions, may receive near- or above- normal summer precipitation totals 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 along the eastern coasts of the Eastern Mediterranean, on the Crete, in 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 period 1981-2010.

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-15**

- 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
- South East European Virtual Climate Change Center hosted by Republic Hydrometeorological Service of Serbia, Republic of Serbia
- 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