





## Step 3 of the MEDITERRANEAN CLIMATE OUTLOOK FORUM (MedCOF-14) Updated 22<sup>nd</sup> May 2020

## SEASONAL OUTLOOK FOR THE SUMMER SEASON 2020 FOR THE MEDITERRANEAN REGION

Climate experts from WMO RA VI RCC Network Node on long-range forecasting (Meteo France), WMO RA VI RCC Network Node on climate monitoring (Deutscher Wetterdienst, Germany), WMO Northern Africa RCC Network Node on long-range forecasting (Directorate of National Meteorology, Morocco), WMO Northern Africa RCC Network Node on climate monitoring (National Institute of Meteorology, Tunisia), South East Europe Virtual Climate Change Centre (SEEVCCC, Serbia), National Hydrometeorological Services and Research Institutes of MedCOF region provided their valuable contribution to the successful implementation of MedCOF-14 by developing the relevant documents and providing scientific guidance and recommendations.

The MedCOF-14 comprised of the following steps:

- > Step 1: verification of the MedCOF-13 seasonal forecast
- > 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 MedCOF web site: <a href="http://www.medcof.aemet.es">http://www.medcof.aemet.es</a>.







## MedCOF- 14 CLIMATE OUTLOOK FOR THE 2020 SUMMER SEASON<sup>1</sup>

This prediction is based on output from dynamical models, statistical models and known teleconnections of large-scale climate features.

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

Atmospheric response is consistent over the 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 Balkans 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 heat waves

<sup>&</sup>lt;sup>1</sup>The graphical representation of climate outlook in this statement is only for guidance purposes, 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.







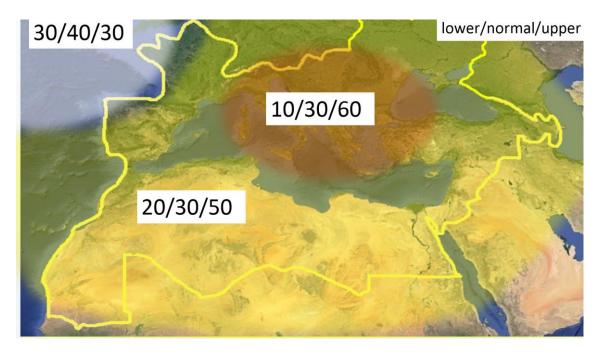


Figure 1. Graphical presentation of the 2020 summer temperature outlook. The maps show the probabilistic consensus forecast for tercile categories of anomalies for seasonal mean temperature, relative to the period 1981-2010. Due to the climate warming trend anomalies are affected by the selected reference period.

Within this general context, temperature should be warmer than normal over most of the domain, with a stronger signal centered on the Balkans. Over Northwestern part, the more intense westerly flow forecasted could damp the warm signal, with more likelihood of normal conditions.

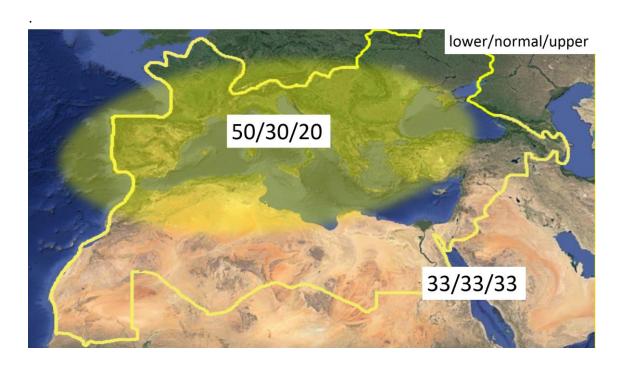








Figure 2. The same as figure 1 but for precipitation.

Precipitation forecasts shows drier than normal conditions over Southern Europe and Mediterranean Sea. For the rest of the region no large-scale precipitation signal is present in the forecasts (see figure 2). The climatological forecast (33, 33, 33) over the Southern part of the domain also implies the fact that no meaningful forecast can be provided for these seasonally dry areas.

Sub-seasonal variations, not predictable a long time in advance, may dominate at times, so regular updates to the forecast are strongly recommended. In addition, local factors (for example SSTs in the smaller basins of the region) may shape local variability at a regional level.

Note that it is necessary to express seasonal forecasts in terms of probability due to inherent uncertainty. Notice that the sub-Regional Climate Outlook Forums (SEECOF and PRESANORD) can provide smaller scale details. Any further advice on the forecast signals, smaller scales, shorter-range updates and warnings will additionally be available throughout the summer from the National Meteorological Services, along with details on the methodology and skill of long-range predictions.