Step 3 of the
MEDITERRANEAN CLIMATE OUTLOOK FORUM (MedCOF-18)
Updated 24ᵗʰ May 2022

SEASONAL OUTLOOK FOR THE SUMMER SEASON 2022 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-18 by developing the relevant documents and providing scientific guidance and recommendations.

The MedCOF-18 comprised of the following steps:

- ➢ Step 1: verification of the MedCOF-17 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 2021-2022 winter season.

All relevant documentation is posted and updated in MedCOF web site: http://www.medcof.aemet.es .

MedCOF- 18 CLIMATE OUTLOOK

FOR THE 2022 SUMMER SEASON[1]

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

Observed sea surface temperatures and forecast for the coming three months show moderate la Niña conditions and negative Indian Ocean Dipole, while positive anomalies are taking place in the equatorial Atlantic. Most models show a typical atmospheric response to la Niña conditions, with good agreement for a negative PNA pattern. Over the Atlantic, a majority of models favour NAO+ and EA+ scenarios, so zonal circulation is expected to predominate. Soil is dry over northwestern parts of the domain, which is associated with an enhancement of heat waves.
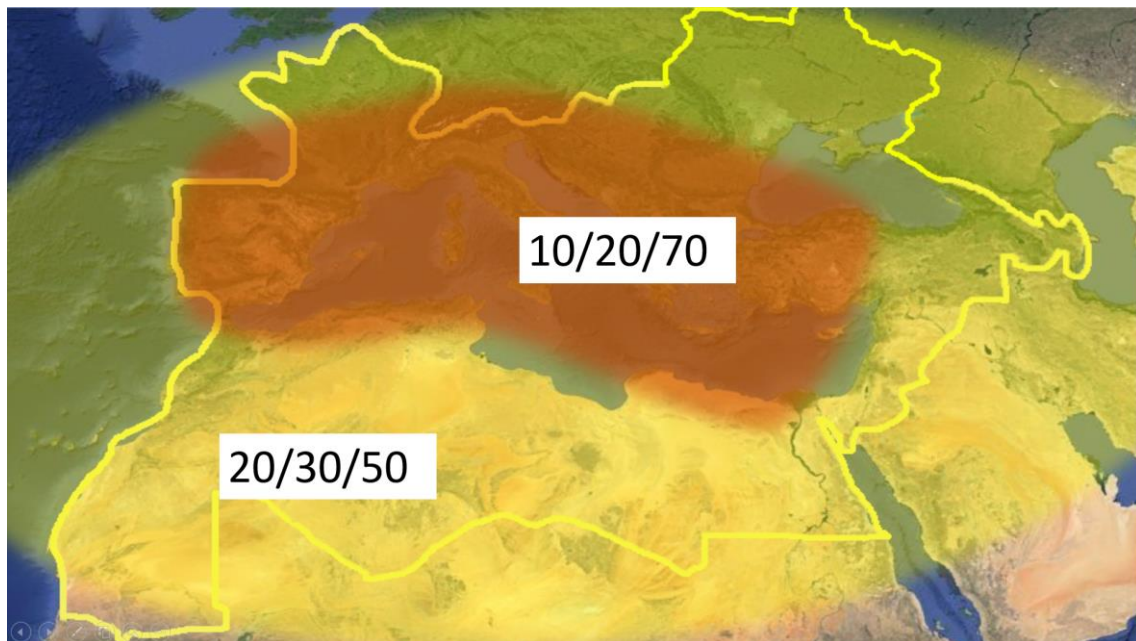

Figure 1. Graphical presentation of the 2022 summer temperature outlook. The maps show the probabilistic consensus forecast for tercile categories of anomalies for seasonal mean temperature, relative to the period 1981-2010. Due to the climate warming trend anomalies are affected by the selected reference period.

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[1]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.

Within this general context, temperature should be warmer than normal for most of the domain. Even warmer probability is expected over an area closer to the Mediterranean Sea.
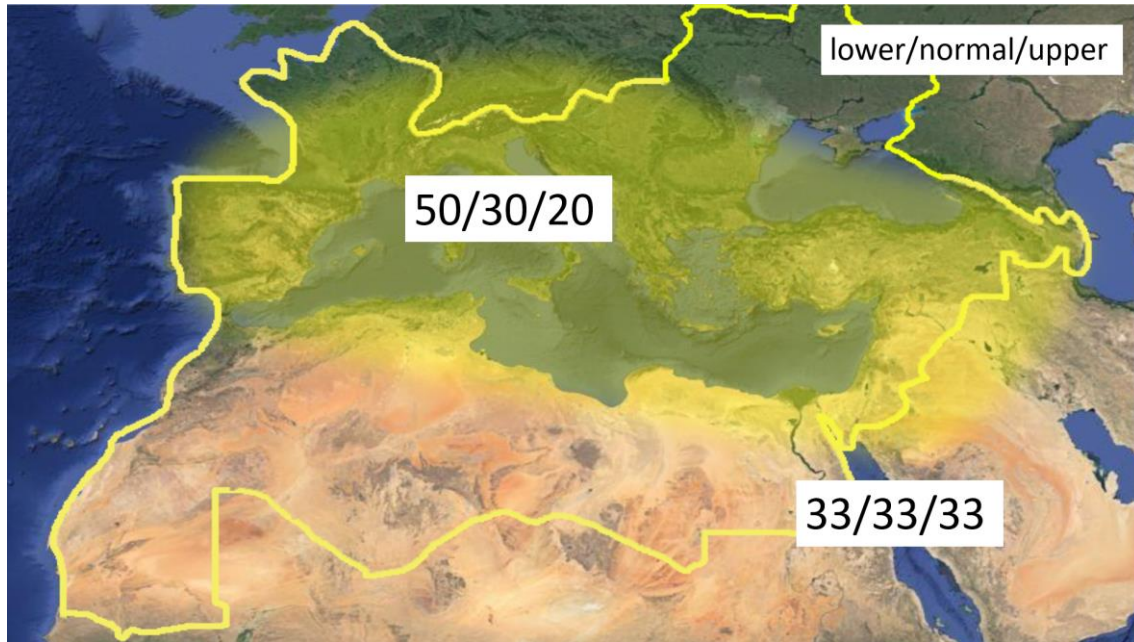

Figure 2. The same as figure 1 but for precipitation.

Precipitation forecast show a robust dry signal for the Mediterranean Sea, Southern Europe and Middle East. The rest of the domain does not show any priviledge scenario for precipitation. The climatological forecastv(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.