





Step 3 of the MEDITERRANEAN CLIMATE OUTLOOK FORUM (MedCOF-13) Updated 25th November 2019

SEASONAL OUTLOOK FOR THE SUMMER SEASON 2019 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-13 by developing the relevant documents and providing scientific guidance and recommendations.

The MedCOF-13 is comprised of the following steps:

- > Step 1: verification of the MedCOF-12 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 2019-2020 winter season.

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







MedCOF- 13 CLIMATE OUTLOOK FOR THE 2019/20 WINTER SEASON¹

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 neutral ENSO conditions with most models showing high agreement for ocean evolution. The Indian Ocean Dipole (IOD) is main driver showing a clear signal with strong positive phase (warm anomalies over western tropical Indian Ocean and cold anomalies over the East), influencing the atmospheric circulation. Consequently, this positive phase translates to drier than normal signal over the Maritime Continent and Australia and wetter than normal conditions over eastern Africa. Most models tend to show teleconnections with IOD foreseen towards Middle East and Central Asia. As continuation of previous forecasts, models show good agreement on favour of positive phases of East Atlantic (EA) and North Atlantic Oscillation NAO (which are two main modes of variability over the Atlantic), possibly linked with the strong IOD positive signal.

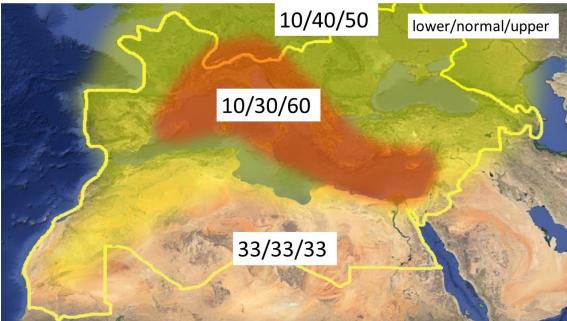


Figure 1. Graphical presentation of the 2019/20 winter temperature outlook. The maps show the probabilistic consensus forecast for tercile categories of anomalies for seasonal mean temperature, relative

¹The 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.







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 for most of the European continent and over the Mediterranean. Probability for warmer tercile is higher over western and central Mediterranean.

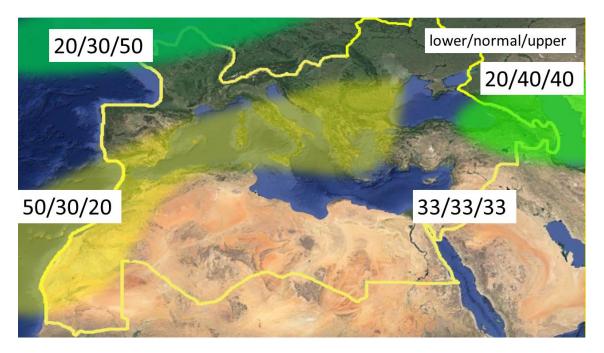


Figure 2. The same as figure 1 but for precipitation.

Precipitation shows a clear latitudinal gradient with wetter than normal conditions over North-Western Europe and a dry tongue protruding towards the Southern Mediterranean region. A slightly wet signal coming from the East can affect the Easternmost countries of the domain. The rest of the region does not show any privileged scenario for precipitation.

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 winter from the National Meteorological Services, along with details on the methodology and skill of long-range predictions.