



**WMO Northern Africa**  
RCC Network

**WMO RA VI**  
RCC Network



**Step 3 of the  
MEDITERRANEAN CLIMATE OUTLOOK FORUM (MedCOF-22)  
Updated 24<sup>th</sup> May 2024**

**SEASONAL OUTLOOK FOR THE SUMMER SEASON 2024 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-22 by developing the relevant documents and providing scientific guidance and recommendations.

The MedCOF-22 comprised of the following steps:

- Step 1: verification of the MedCOF-21 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 2024 summer season.

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

## MedCOF- 22 CLIMATE OUTLOOK FOR THE 2024 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 show that the moderate El Niño event present in winter has rapidly faded away, and forecasts for the coming three months show a transition to a moderate La Niña conditions. Indian Ocean Dipole is currently in neutral phase, but some models show agreement in a transition to a positive phase. Most of the Atlantic basin is currently experiencing above normal temperatures, and is expected to continue doing so. In the atmosphere, models show a trend to favour positive summer NAO and East Atlantic patterns, but there are divergences among models on the geopotential anomaly patterns proposed. With this general context, above normal temperatures can be expected over most of the domain, with a more robust signal over Southern and Eastern parts of the domain.

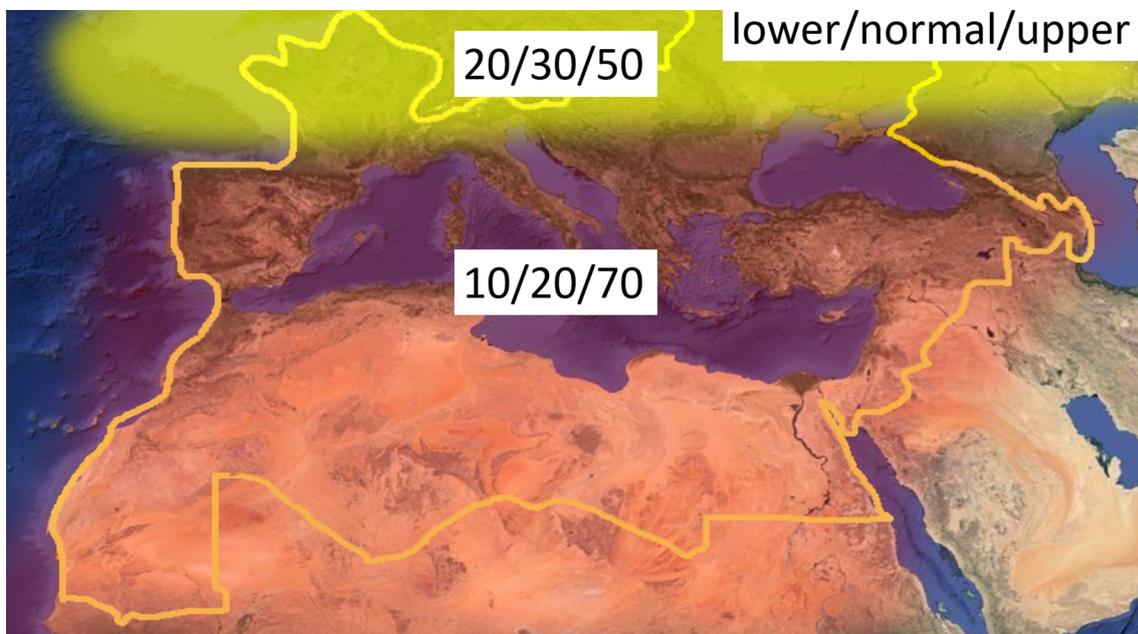


Figure 1. Graphical presentation of the 2024 summer temperature outlook. The maps show the probabilistic consensus forecast for tercile categories of anomalies for seasonal mean temperature, relative to the period 1991-2020. Due to the climate warming trend anomalies are affected by the selected reference period.

<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.

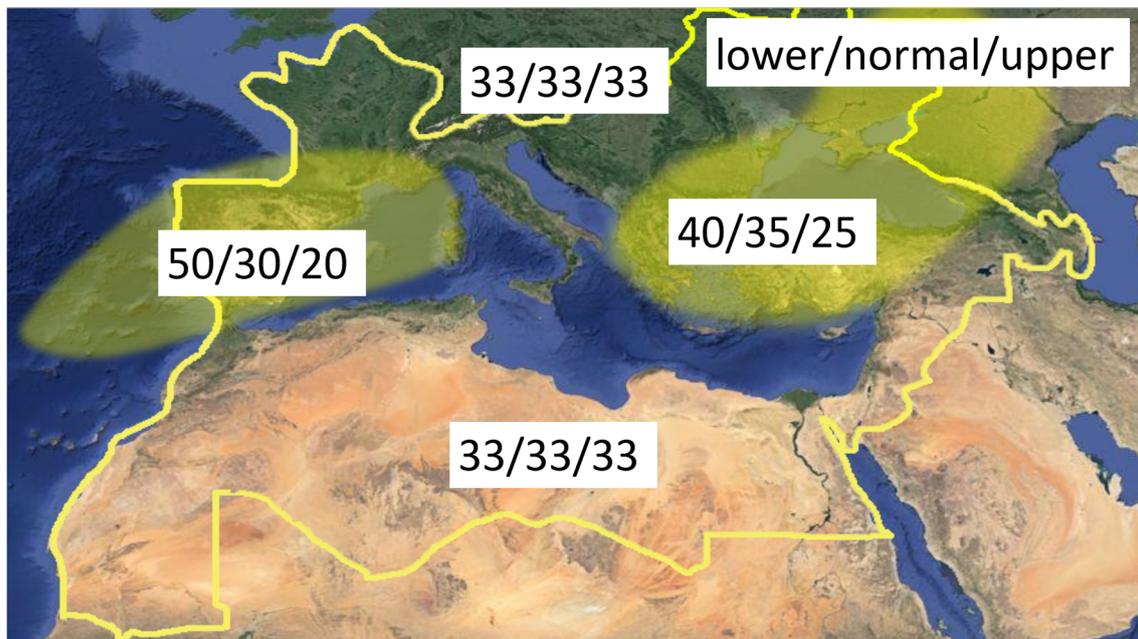


Figure 2. The same as figure 1 but for precipitation.

Precipitation forecasts show a dry signal over Western Mediterranean, and, with less probability, over parts of the Balkans, Turkey and The Ukraine, with no clear signal over the rest of the domain. However, a significant wet signal is present in the models over wide parts of Middle East and Easternmost Africa, so there is some uncertainty on precipitation over SouthEastern Egypt. Over the rest of North African domain, the area without signal also means that is a climatologically dry area.

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.