



WMO RAI



WMO RA VI
RCC-Network



**Step 3 of the
MEDITERRANEAN CLIMATE OUTLOOK FORUM (MedCOF-6)
Last updated 27th May 2016**

**SEASONAL OUTLOOK FOR THE SUMMER SEASON 2016 FOR THE
MEDITERRANEAN REGION**

Climate experts from WMO RA VI RCC Network Nodes on long-range forecasting (Meteo France, France) and climate monitoring (Deutscher Wetterdienst, Germany), WMO North African pilot RCC Network Nodes on long-range forecasting (Directorate of National Meteorology, Morocco) and climate monitoring (National Institute of Meteorology, Tunisia), WMO African Center of Meteorological Application for Development (ACMAD, Niger), South East European Virtual Climate Change Centre (SEEVCCC, Serbia), Euro-Mediterranean Center on Climate Change (CMCC, Italy), National Hydrometeorological Services and Research Institutes of MedCOF region provided their valuable contribution to the successful implementation of MedCOF-6 by developing the relevant documents and providing scientific guidance and recommendations.

The MedCOF-6 comprised of the following steps:

- Step 1: verification of the MedCOF-5 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 2016 summer season.

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

MedCOF- 6 CLIMATE OUTLOOK FOR THE 2016 SUMMER SEASON¹

This prediction is based on output from dynamical models, 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.

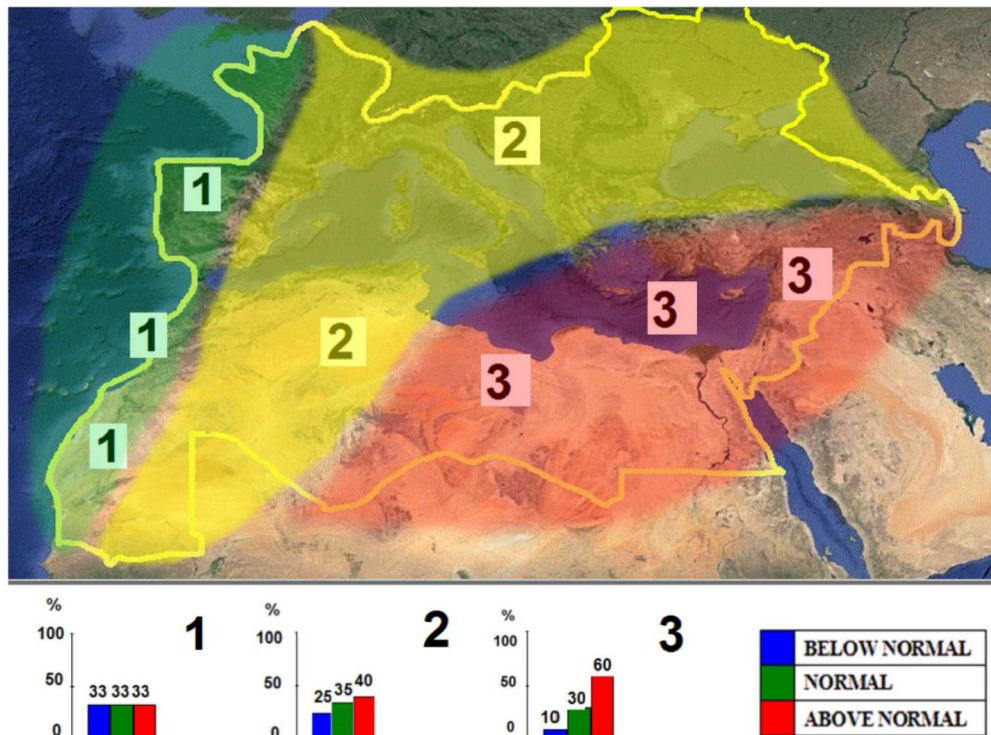


Figure 1. Graphical presentation of the 2016 summer temperature outlook. The maps show the probabilistic consensus forecast for tercile categories of anomalies for seasonal mean temperature, relative to the period 1981-2010. Due to the climate warming trend, anomalies are affected by the selected reference period.

The widespread warm global anomalies and particularly over Europe and North Africa makes an exception over the western part of the MedCOF domain. The cold oceanic influence forecasted by some systems could be important in the very western regions including the Iberian Peninsula and western North Africa. Elsewhere an East Atlantic like circulation should lead to an enhanced probability of positive anomalies. However, due to the large uncertainty concerning the position of circulation

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.

anomalies, this signal should be taken with caution: it is more probable over Mediterranean regions and Eastern Europe. There exists a moderate probability of occurrence of heat waves in the eastern part of the domain mainly supported by an incipient Indian monsoon (see figure 1).

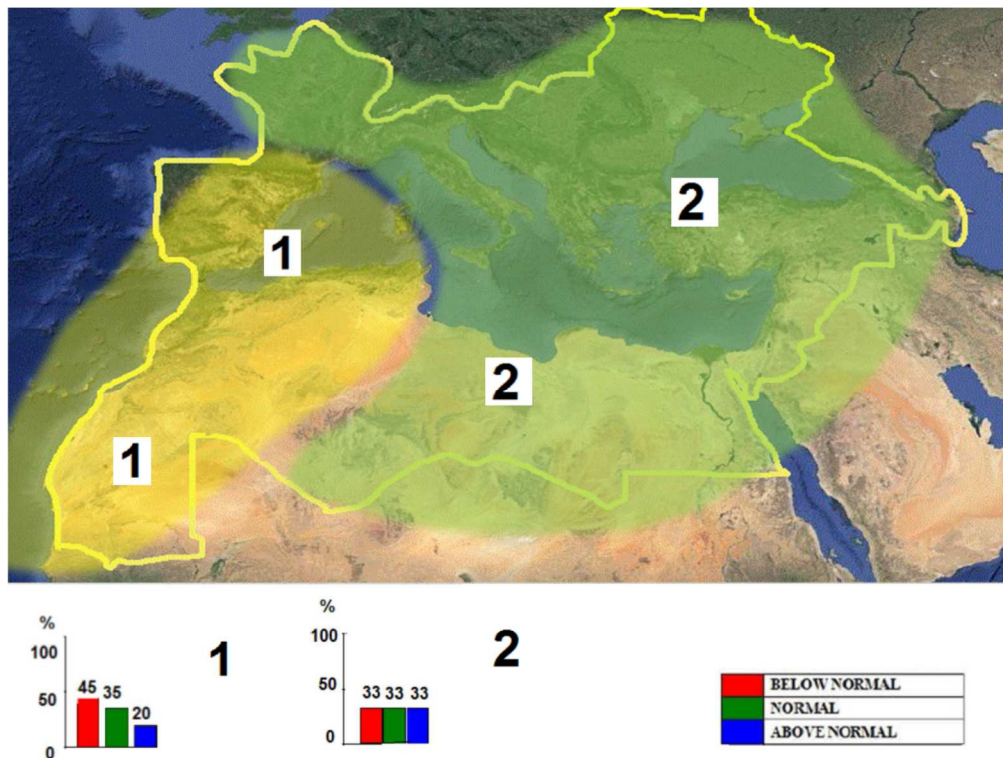


Figure 2. The same as figure 1 but for precipitation.

For precipitation uncertainties are larger than for temperature. Over the MedCOF region a drier than normal signal is forecasted by several models over Iberia and western North Africa, according with the main probable scenario in terms of circulation. Elsewhere, no clear signal emerges (see figure 2).

Note that it is necessary to express seasonal forecasts in terms of probability due to inherent uncertainty. Any further advice on the forecast signals, smaller scales, shorter-range updates and warnings will be available throughout the summer from the National Meteorological Services, along with details on the methodology and skill of long-range predictions.