













# **Second Session (on-line) of the** MEDITERRANEAN CLIMATE OUTLOOK FORUM (MedCOF-2) 27 May 2014

### SEASONAL OUTLOOK FOR THE SUMMER SEASON 2014 FOR THE **MEDITERRANEAN REGION**

Climate experts from WMO RA VI RCC Network Nodes on long-range forecasting (Meteo France, France), WMO RA VI RCC Network Node on climate monitoring (Deutscher Wetterdienst, Germany), WMO RA I NMHS (Directorate of National Meteorology, Morocco, and National Institute of Meteorology, Tunisia)<sup>1</sup>, and from other National Hydrometeorological Services and Institutes from the MedCOF region (see Annex) provided their valuable contribution to the successful implementation of MedCOF-2 by developing the relevant documents, intervening during the forum discussions and providing scientific guidance and recommendations.

MedCOF-2 has comprised the following steps:

### > STEP-1: Verification of winter 2013-14 seasonal forecast

Verification of the MedCOF-1 Winter forecast (December 2013 – February 2014) was facilitated by P. Bissolli (DWD, Germany), S. Ben Rached (INM, Tunisia) and A. Mestre (AEMET, Spain). All countries were invited to provide a national verification report including information on:

- information on high-impact events of the last winter season,
- brief assessments of the correctness of the MedCOF-1 outlook, and
- comments on user perceptions of the MedCOF-1 outlook

Deadlines: 18th April for the National verification reports posted on the forum and 9th May for the summary report also posted on the forum.

### > STEP-2: Assessment of the current state of climate

The assessment of the current state of climate, including large-scale climate patterns worldwide, and assessments of its likely evolution in the course of the next months was initially drafted by J.-P. Céron (Meteo-France) and S. Ben Rached (INM, Tunisia). Then, discussions were moderated by R. Bojariu (NMA, Romania) and F. Driouech (DNM, Morocco) using the forum tool. Based on first draft and discussions, J.-P. Céron -with the inputs from P. Bissolli and from moderatorsprepared the final draft.

Deadlines: 16th May for the first draft posted in the forum, followed by a week of forum discussions and 23th May for the final version posted in the forum.

<sup>&</sup>lt;sup>1</sup> The NMHS of Morocco, Tunisia, Algeria, Libya and Egypt are currently working towards the establishment of a North African RCC-Network

## > STEP-3: Building of the consensus statement

The building of the consensus statement for climate outlook for summer 2014 (June, July, August) started from the draft reports provided by RCCs on seasonal forecasts prepared by J.-P. Céron and F. Driouech. Discussions were moderated by S. Gualdi (CMCC, Italy), Y. Levi (IMS, Israel) and A. Zakey (EMA, Egypt). Based on discussions and on the first draft, J.-P. Céron and F. Driouech with input from moderators and assisted by E. Rodríguez- prepared the final report.

Deadlines: 21st May for the first draft posted in the forum, followed by a week of forum discussions and 28th May for the final version posted in the forum

All relevant documentation is posted and updated in MedCOF web site: <a href="http://medcof.aemet.es">http://medcof.aemet.es</a> . The AEMET team –E. Sánchez, F. Franco, I. Mestre and J. Voces- prepared material for discussion and technically supported the web site and forum facilities.

## MedCOF- 2 CLIMATE OUTLOOK FOR THE 2014 SUMMER SEASON

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

The development of a warm event in the Pacific suggests some possible predictability, but mostly located in the Tropics at this stage (Pacific, Indian Ocean and Atlantic). Nevertheless, some predictability could be present over North-Africa and the Mediterranean basin.

The maps show the probabilistic consensus forecast for tercile categories of anomalies for seasonal mean temperature and precipitation, relative to the period 1981-2010.

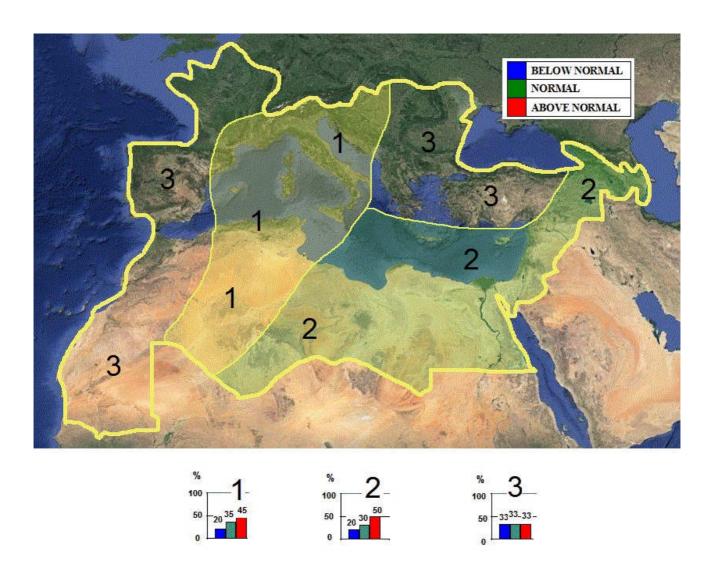


Figure 1. Graphical presentation of the 2014 summer temperature outlook

Although for most of the MedCOF domain the uncertainty for the temperature prediction is high, there is a weak tendency for the upper tercile in the Eastern and Central part of the domain and most of the Mediterranean Sea (regions 1 and 2). The Atlantic facade of the domain, most of the Balkan

Peninsula and Turkey show no signal and climatology is therefore assigned for all three categories (region 3).

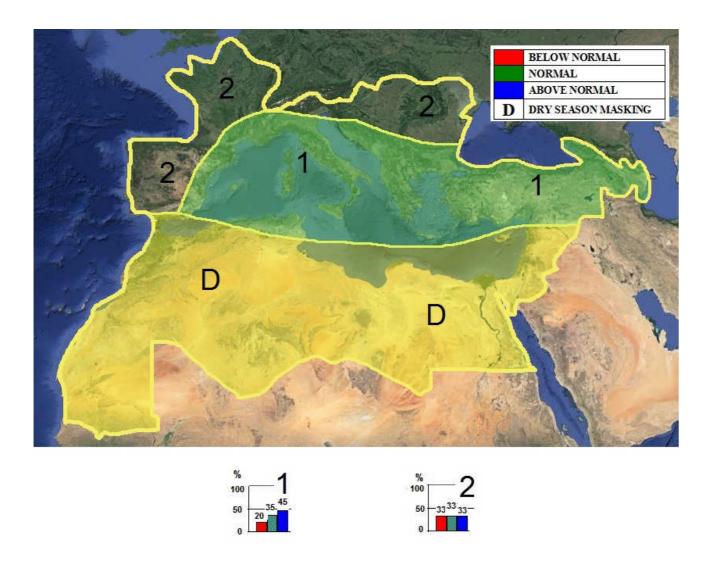


Figure 2. Graphical presentation of the 2014 summer precipitation outlook

Precipitation in the Central and Eastern part of the MedCOF domain shows a slight preference for the above normal tercile (region 1). The Atlantic regions of the Iberian Peninsula and France and Northern Balkans show no signal different from climatology (region 2). The Southern part of the domain is masked as dry season and therefore no categories are assigned (region D).

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.

#### **ANNEX: Contributors to MedCOF-2**

- > Armstatehydromet, Armenia
- Federal Hydrometeorological Service of Bosnia and Herzegovina, Bosnia and Herzegovina
- Republic Hydrometeorological Service of the Republic of Srpska, Republic of Srpska, Bosnia and Herzegovina
- National Institute of Meteorology and Hydrology, Republic of Bulgaria
- Meteorological and Hydrological Service, Republic of Croatia
- ➤ Meteorological Service, Republic of Cyprus
- Egyptian Meteorological Authority, Egypt
- > Météo-France, Republic of France
- ➤ National Environmental Agency of Georgia, Georgia
- ➤ Deutscher Wetterdienst, Federal Republic of Germany
- > Hellenic National Meteorological Service, Greece
- ➤ Israel Meteorological Service, Israel
- ➤ Institute of Biometeorology, Italy
- ➤ Euro-Mediterranean Center on Climate Change, Italy
- ➤ National Centre of Meteorology and Aeronautical Climatology, Italy
- ➤ Institute of Atmospheric Sciences and Climate (ISAC) of the Italian National Research Council, Italy
- Libyan National Meteorological Centre, Libya
- ➤ Hydrometeorological Institute of Montenegro, Montenegro
- National Centre for Meteorological Research, Directorate of National Meteorology, Morocco
- ➤ National Meteorological Administration, Romania
- Republic Hydrometeorological Service of Serbia, Republic of Serbia
- South East European Virtual Climate Change Center hosted by Republic Hydrometeorological Service of Serbia, Republic of Serbia
- Environmental Agency of the Republic of Slovenia, Slovenia
- > Agencia Estatal de Meteorología, Spain
- ➤ Institut Català de Ciències del Clima, Spain
- > Hydrometeorological Service of Macedonia, Former Yugoslav Republic of Macedonia
- ➤ National Institute of Meteorology, Tunisia
- ➤ Turkish State Meteorological Service, Republic of Turkey
- ➤ United Nations Environment Programme / Mediterranean Action Plan
- World Meteorological Organization