

Concept note for the 3<sup>rd</sup> MEDARE meeting on

## **Building up Mediterranean long-term and homogenised climate datasets: strategies and prospects**

**The WMO/MEDARE Initiative announces the 3rd MEDARE Expert Team meeting to be held in Istanbul (Turkey) on the 27-28 September 2012**

**The WMO-MEDARE Expert Team** meeting builds on the results and agreements taken under the second *WMO International Workshop on Addressing climate data sources and key records for the Mediterranean Basin in support of an enhanced detection, prediction and adaptation to climate change and its impacts* (Nicosia, Cyprus, 10-12 May 2010) and, particularly, in the discussions and agreements seen during the third day centred on discussing the Mediterranean network and the data exchange policy under MEDARE for regulating access to the MEDARE datasets.

Huge amounts of surface climate observations that have been measured in the past still remain in perishable and unusable formats and are at risk of being lost forever over the GMR, despite the efforts that are being put at the national and regional scales for enhancing the availability and accessibility to long and key climate records. Besides, most of the already available surface climate time-series are not of quality and homogeneity proven for confidently using them in any climate change analyses or adaptation assessment. The recovery of this rich heritage of historical data will enhance our scientific knowledge and capability to improve, for instance, decadal climate predictions and produce vital climate change services that society is nowadays demanding.

Rescuing historical data, reconstructing long-term land-based climate records and bringing these high-quality time-series into the 21<sup>st</sup> century is the long-term goal of MEDARE. In this regard, MEDARE aims to achieve a number of sustainable development goals by providing decision- and policy- makers in all climate-sensitive sectors in the GMR with the most scientifically sound and longest surface climate datasets. This includes access to longer series for assessing impact/sector models and disaster risk reduction in support of the Global Framework for Climate Services (GFCS) in the GMR. Ultimately, MEDARE outputs will be used in defining and/or adopting optimal strategies to mitigate climate change, and for improving and/or developing plans, activities and operations in adapting the countries to climate change impacts across the GMR.

The main aim of the MEDARE Expert Team meeting is to foster discussion and agreement on the best ways to bring countries (NMHSs) views in order to start populating and developing the Mediterranean homogenised datasets and data exchange policy within MEDARE. In accordance and accomplishment with the MEDARE's end goal for consolidating and progressing in the development of

long-term and high-quality surface climate datasets for the Greater Mediterranean Region (GMR), which support confidently the detection, projection and adaptation to climate change and its impacts at both national and regional scales, the Expert Team meeting will focus on defining and carrying out the best strategies to make possible the MEDARE's end-goal become true shortly. It is mainly addressed to members of the MEDARE Working Group 4 (WG4: <http://www.omm.urv.cat/MEDARE/working-group-4.html>), while it is also open to other self-funded scholars and scientists interested in climate data and metadata rescue, preservation, digitisation, homogenisation, archiving and dissemination across the Mediterranean countries.

Furthermore, the next WMO Extraordinary Congress (October 2012) brings to MEDARE the opportunity of looking for the agreement of the GMR's Permanent Representatives (PRs) within WMO, in order to start populating such GMR surface climate datasets. The focus for the initial development of such a dataset is put on the longest, more continuous and reliable temperature and precipitation time-series at the daily scale existing in digital format on a country-by-country basis and on harmonising current availability of digitised data at each NMHS with other efforts for recovering and extending back in time as further as possible carried out under several European research projects.

The Expert Team meeting, taking also into accounts the recommendations of the aforementioned 2<sup>nd</sup> MEDARE workshop (see pages XII-XIV of the Summary Report at [http://www.omm.urv.cat/MEDARE/docs/2nd\\_Proceedings.pdf](http://www.omm.urv.cat/MEDARE/docs/2nd_Proceedings.pdf)), will address the following topics:

1. To discuss on a country-by country basis which longer, more continuous and reliable daily temperature and precipitation time-series are a feasible national contribution for initiating/populating the MEDARE climate datasets (\*)
2. Steps to be taken to develop a shared long-term and high-quality (homogenised) climate datasets that will be available for MEDARE Members for their climate change adaptation assessments, including the quality control and homogenisation of the climate time-series.
3. Encourage responses to the questionnaire to be sent to all the GMR PRs asking them for their views on the whole process that allows MEDARE the development of shared Mediterranean climate datasets: from rescuing/digitising past climate records to ensure in all the countries
4. Organise a side event focused on MEDARE and addressed to all the GMR PRs making use of the opportunity that brings the celebration of the WMO extraordinary Congress.

**(\*)**The invited experts will have an active role prior to, during and after the meeting. Participants will prepare in advance a tentative list of the potential daily climate (temperature and precipitation) records that their NMHS could feasibly contribute with to the Mediterranean Climatological Reference Datasets, along with their metadata. They will be also requested to comment and modify

the contents of the questionnaire to be send to all the GMR PRs, as well as following up and encouraging the responses from their NMHS.