

Introduction to the MEDARE workshop proceedings

By Manola Brunet

are available and what part of the record is digitally available (from whom), what part still needs recovering and digitizing and what homogeneity assessments have been carried out on the series. The national lists would be combined into a GMR inventory of source availability of the long and potentially long records (> 50 years).

Development of the Web Portal

The University Rovira i Virgili in Tarragona agreed to host the site, where information on goals, people, contact lists, working groups, documentation, inventory of the longest climate records, and other MEDARE activities will be provided. It will include restricted areas for the MEDARE community and its working groups.

Set up a number of email accounts for contacting working groups with specific questions and general advice:

- ∞ Where might early colonial material be held?
- ∞ What are the best scanners to purchase?
- ∞ Which is the best OCR software for printed material?
- ∞ Which homogenization software is best for specific variables?

Next meeting: Greece!

Phil Jones

December 2007

This proceedings is the result of a cooperative effort made by the MEDARE Community (<http://www.omm.urv.cat/MEDARE/index.html>), which brings together scientists from universities, research centres, international institutions and projects and climatologists from the National Meteorological and Hydrological Services (NMHSs) in the Greater Mediterranean Region (GMR). It is based on the contributions presented at the International Workshop on Rescue and Digitization of Climate Records in the Mediterranean Basin held at the University Rovira i Virgili (Tarragona, Spain, 28-30 November 2007), which was organised by the World Meteorological Organization / World Climate Data and Monitoring Programme (WMO/WCDMP), the Agencia Española de Meteorología (AEMET: Spanish Meteorological Office) and the University Rovira i Virgili.

The workshop was impelled by WMO/WCDMP, in order to give a decided impulse to data rescue activities over the GMR through involving data producers and data analysts in the common enterprise of developing high-quality/long-term climate datasets and, then, to enhance climate data availability, which can be more confidently used in the assessments of regional climate change detection and modelling, their related impacts over the Mediterranean socio-ecosystem and to define the best strategies to adapt the countries to the current and future climate change challenges.

The proceedings provides, for the very first time, a comprehensive overview on the needs and benefits of undertaking Data Rescue (DARE) activities, on existing international and regional DARE projects and programs and reviews long-term climate data availability and potential for fostering DARE missions at the sub-regional and national scales across the GMR. It has been organised in three main sections preceded by a foreword from Mr. Michel Jarraud, Secretary-General of WMO, the statements in the opening ceremony, the summary of the workshop, and followed by the reference and abbreviation lists.

The first section is devoted to emphasise needs and expectable benefits, both scientific and socio-economic, of undertaking DARE activities. It is open by an assessment on the key importance of climate data and information to face development challenges. Scientific benefits of bringing old instrumental climate records into the 21st century are discussed in the second chapter. Climate data availability for monitoring and research purposes is explored in the third chapter, with a special emphasis put in the Mediterranean region. The needs for a historical climate data and metadata bases for the Mediterranean are discussed next. The activities and procedures for recovering one of the longest climate records in the Mediterranean, the Gibraltar record, are described in the fifth chapter. A review on currently available homogenisation procedures, together with the need of developing long-term homogeneous climate records, is assessed in the penultimate chapter. Finally, tips and tricks in data rescue and digitization learned from the Dutch experience are discussed in the last chapter of the section.

The second section is dedicated to review existing regional initiatives and climate datasets, with a special focus over the Mediterranean. First, the global project "Atmospheric Circulation Reconstruction over the Earth", aimed at facilitating the recovery, extension and consolidation of global historical terrestrial and marine instrumental daily to sub-daily surface observations covering the last 100-2050 years is presented. The Italian experience on enhancing availability and quality of secular climate records is exposed in the second chapter. The NOAA's Climate Database Modernization Program is described in the third chapter. Status, deficiencies and strategies for fostering DARE missions over eastern Mediterranean and the Balkans sub-regions are presented in the following two chapters. Finally, the section is closed by a contribution on the need of counting with the collaboration of non-profit/non-governmental organisations in data rescue and digitisation activities.

The third section is focused on reviewing national climate data rescue projects across the Mediterranean. Experiences gained from Portugal on recovering, digitising, quality controlling, homogenising and making available the longest Portuguese climate records are exposed in the first chapter. Availability and management of long climate records over Spain is assessed next. DARE activities and the development of climate databases over Andorra and Catalonia are discussed on the third and fourth chapters. The efforts dedicated by Météo-France to the recovery of French and overseas long climate records at different temporal scales are described in the following chapter. From chapter sixth to chapter tenth, current climate data availability, the DARE activities carried out by Slovenian, Croatian, Montenegro and Bulgarian NMHSs and the prospects for improving climate data coverage over this sub-region are discussed. The chapter tenth provides an overview of data rescue operations of historic meteorological data at Hellenic National Meteorological Service in Greece. Constraints for processing climatological data and developing long-term climate records over Georgia are assessed in the eleventh chapter. Rescue and digitisation efforts at the Climatological Service of the Lebanese Meteorological Department are described next. Availability and potential of developing long meteorological records over Israel are discussed in the thirteenth chapter, while the fourteen is focused on exploring these issues over Cyprus. Finally, the last two chapters are devoted to give details on the meteorological networks of Tunisia and Algeria and on the DARE activities and the difficulties found for undertaking DARE activities over these North-African Mediterranean countries.

The proceedings ends with a reference and abbreviation lists.

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Manola Brunet

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SECTION I: EMPHASIZING NEEDS FOR DARE PROJECTS
