

ESF-MedCLIVAR Workshop on Reconstruction of Past Mediterranean Climate

Unexplored Sources of High Resolution Data in Historic Time

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Past Global Changes



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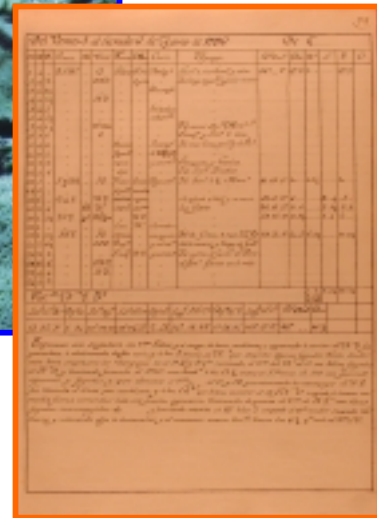
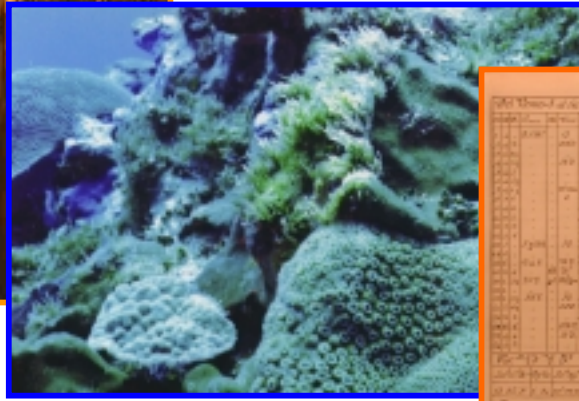


Mediterranean Climate
Variability and
Predictability



Universidad Pablo de Olavide
Olavide en Carmona





WORKSHOP DESCRIPTION

The larger Mediterranean area offers a few long homogenized instrumental station series with daily to monthly resolution (France, Italy, Spain, Portugal, Greece), a wide range of documentary evidence (i.e. reports from chronicles, daily weather reports, ship logbooks, the time of freezing and thawing of waterways, religious ceremonies, etc.) as well as high and low spatio-temporally resolved natural proxies (tree-rings, tropical and non-tropical corals, deep-sea corals, speleothems, boreholes, vermetid reefs, etc.). This wealth of climate information makes the Mediterranean area ideal for climate reconstructions at various time and space scales, as well as for the analysis of changes in climate extremes and socio-economic impacts prior to the period of instrumental data.

Despite the fact that there are many proxy data available from the larger Mediterranean area, the uncertainties of the climate reconstructions increase back in time and a complete picture of the availability of sources potentially relevant for climate reconstruction has not been obtained yet. Many sources have not yet been exhaustively explored and some regions still offer scarce information (i.e. North African coastal regions). Enlarging the quality and coverage of indirect proxy information might be of special relevance in areas which may present sensitivity to climate change and will contribute to a better modelling of past climate in the region. Thus, in order to improve reconstruction skill in time and space and expand climate estimates further back in time, the spatio-temporal coverage of high resolution, high quality, accurately dated, natural and documentary proxy evidence from all countries along the Mediterranean Sea needs to be enlarged. In this context, the newly-launched ESF Research Networking Programme on Mediterranean Climate Variability and Predictability (ESF MedCLIVAR) will contribute to identifying existing and previously unexplored sources with potential for climate reconstruction.

OBJECTIVES

The main aim of the workshop is to identify documentary sources of early instrumental data, preinstrumental observations, including data and proxies from documentary sources and natural proxies (tree-rings, tropical and non-tropical corals, deep-sea corals, speleothems, icecores, etc.), which have not been previously explored and/or identified and can be relevant for the reconstruction of the Mediterranean climate or weather extremes of the past Millennium with high resolution (annual or higher).

The workshop will discuss the different ways of interaction between these data and climate models: to understand the dynamics behind past climate variability and changes recorded in the proxy records, to validate the models and understand their potential and limitations in their estimates of climate change under future scenarios of forcing evolution. In addition, the use of climate models can be a valuable tool for identifying climate-sensitive proxy sites in the Mediterranean as well as for validation of proxy-based reconstruction strategies in the surrogate reality produced by models.

This workshop should be considered as a starting point for a "Past Regional Variability Activity" in the Mediterranean region similar to the ongoing PAGES-Initiative for southern South America. The workshop is expected to act as a bridge for community building within the Mediterranean region - especially incorporating scientists / data from the north African / Arabian community. The workshop and the ESF MedCLIVAR Programme, in the framework of which this workshop is being organized, are expected to create a link between paleo / data / and modelling scientists, thus strengthening the community building effort of the PAGES/CLIVAR intersection.

ATTENDANTS

The workshop will be a meeting point for:

- Scientists with previous experience in the field. They will provide relevant examples which will be used as case studies in the workshops.
- Scientists, archivists, officials, etc... able to identify archives, institutions and natural sites with potential interest for the workshop objectives, specially from northern African and Eastern Mediterranean countries.
- Climate modellers interested in the use of these regional data.

The participation of Ph D students and young scientists with interest in the area of the workshop is highly encouraged. Financial support will be offered to some of the participants. The maximum number of attendants is 55.

WORKSHOP SESSIONS

- Ongoing past climate data recovery in the Mediterranean area.
- Availability of instrumental records in the Mediterranean area.
- Unexplored Archives in the Mediterranean area.
- High resolution natural proxies.
- Interaction between modellers and past climate data collectors.

PRELIMINARY LIST OF SPEAKERS

F. Abrantes (INETI)
R. Allan (British Met Office/Had Center)
M. Barriendos (U. Barcelona)
R. Boehm (Austrian Met. Service)
M. Maugeri (U. Milano)
C. Raible (U. Bern)
S. Silenzi (ICRAM)
J.M. Vaquero (U. Extremadura)
D. Wheeler (U. Sunderland)
E. Zorita (GKSS)

CALL FOR CONTRIBUTIONS

Participants will be able to contribute through oral presentations and posters. The edition of a special issue in a relevant journal of the field will be considered.

DEADLINES FOR INSCRIPTION AND ABSTRACT SUBMISSION

Applications received by September, 1st 2006 will be considered for workshop participation. Information on subscription procedure in:

www.medclivar.eu and <http://www.esf.org>

LOCATION



Universidad Pablo de Olavide (UPO) in Carmona (Seville) (<http://www.upo.es/olavideencarmona/>).



The UPO facilities in Carmona, a city 30km from Seville consist of a palace of the 18th century adapted for courses and conferences. Buses connect very frequently Carmona with Seville, which has an international airport and a high speed train station. A number of rooms have been booked in hotels in Carmona at special rates for workshop participants.

