

MedCLIVAR: Mediterranean CLimate VARIability and predictability project



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MedCLIVAR is a project that promotes coordination of the large scientific community engaged in Mediterranean climate research. The main goals of MedCLIVAR include reconstruction of Mediterranean past climate variability and extremes and natural hazards, the description of patterns and mechanisms characterising its space-time variability, the identification of the forcing parameters responsible for the observed changes, and its response to future emission scenarios. The project focuses on long instrumental data as well as documentary and natural proxy evidence resolving different time and spatial scales. All these data sources are important for the construction of high quality data sets, in order to extend the record of past Mediterranean climate variability over decadal and centennial timescales.

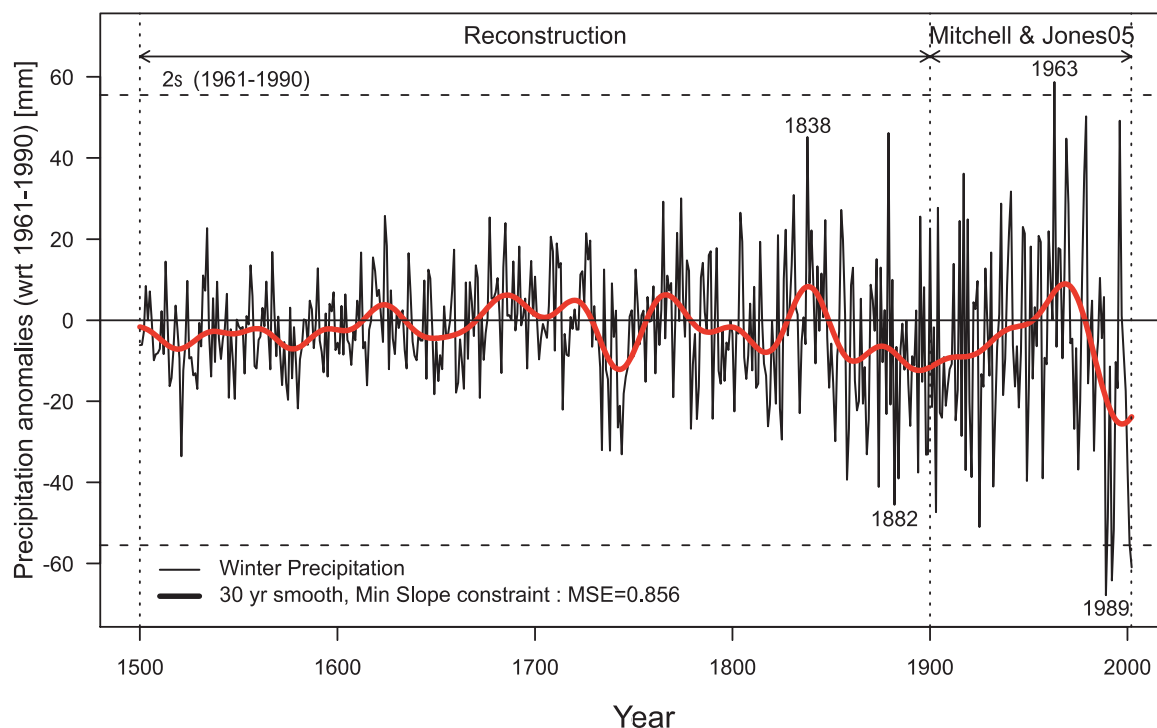
Progress in the understanding of the Mediterranean climate has important environmental, societal and economical implications. The Mediterranean region is characterised by large cultural, economical, political, and demographic gradients in a situation already under environmental stress (heat waves, highly variable precipitation, limited water resources), where inadequate evaluation of climate change impacts and the lack of readiness and of adequate adaptation strategies could result in critical situations.

The idea of the MedCLIVAR project was proposed during the ESF (European Science Foundation) Exploratory Workshop on "Mediterranean Climate Variability and

Predictability" held in Rome, 17-19 May 2004. Subsequently, the project was endorsed by CLIVAR and a Scientific Steering Group (SSG) was formed, which meets regularly for its management.

Activities of MedCLIVAR include the organisation of meetings, schools and workshops, the organisation and support of research projects, and the establishment and strengthening of links to other national and international programs relevant to Mediterranean climate. MedCLIVAR will support a "Mediterranean Climate Variability" session at the EGU General Assembly in Vienna, April 2006. This will be the fourth time such a session is represented in the program. A first result of MedCLIVAR, a book entitled "Mediterranean Climate Variability" and published by Elsevier, will be available at the beginning of 2006. It is a multi-author book that provides an updated description of climate variability in the Mediterranean basin, focusing on its strong inter-annual to decadal features.

MedCLIVAR has important links and cooperates closely with PAGES, who has a representative on the MedCLIVAR SSG. Reconstruction of past Mediterranean climate will be the subject of the first MedCLIVAR workshop to be held in 2006. More information on MedCLIVAR goals, results, activities, upcoming events and how to join the project is available on the ENEA-hosted webpage: <http://clima.casaccia.enea.it/medclivar>.



Winter (Dec-Jan-Feb) averaged-mean Mediterranean precipitation anomalies (with reference to the period 1961-1990) from 1500 to 2002, defined as the average over the land area 10°W to 40°E and 35°N to 47°N (thin black line). The values for the period 1500 to 1900 are reconstructions. The thick black line is a 30-year smooth 'minimum slope' constraint. The dashed horizontal lines are the 2 standard deviations of the period 1961-1990. The driest (1989) and the wettest (1963) Mediterranean winters are denoted. (figure from Luterbacher et al., 2005, in "Mediterranean Climate Variability" published by Elsevier, Amsterdam)