

ESF-MedCLIVAR Workshop on:

Conveners/Organizers

Sergio M. Vicente-Serrano
Instituto Pirenaico de Ecología-CSIC

Ricardo M. Trigo
U. de Lisboa

Ricardo García-Herrera
U. Complutense de Madrid

Hydrological, socioeconomic and ecological impacts of the North Atlantic Oscillation in the Mediterranean region

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Zaragoza • Spain



Sponsored by:



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Mediterranean Climate
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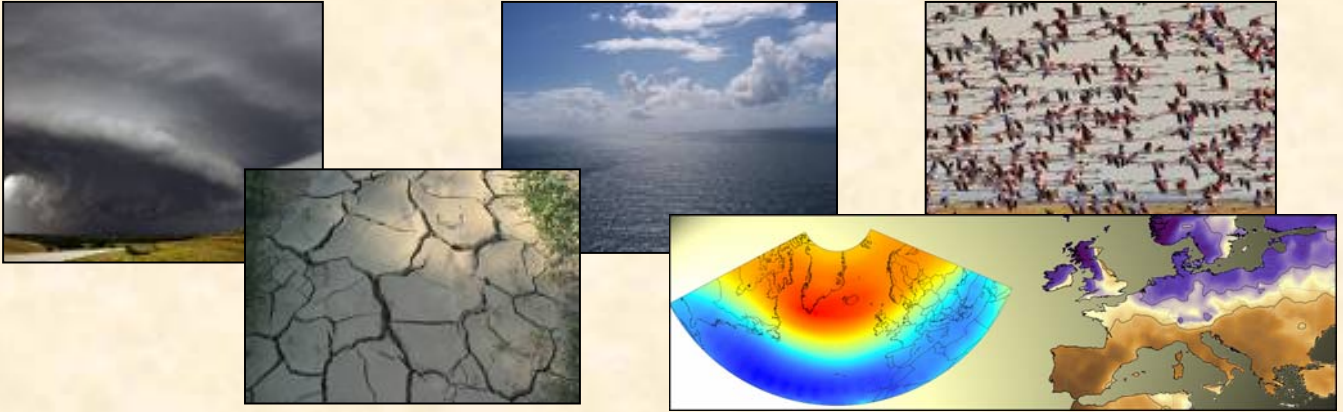
University of Zaragoza



Aragón
Government



Institute of Environmental
Sciences-UZ



WORKSHOP DESCRIPTION

The workshop will focus on impacts in the Mediterranean basin of the North Atlantic Oscillation (NAO). This will constitute a unique forum to present the state of the art of the numerous studies undertaken on Hydrological, Socioeconomic and Ecological impact of the NAO. As such it aims to gather the expertise of researchers from several complementary earth science fields (Geography, Hydrology, Remote-sensing, Climatology, Agriculture, Energy), but that have been lacking a common ground.

The association between the NAO and the Mediterranean climate variability has been well documented, showing that it is one of the main forcings in the region. Its impact on extreme events such as droughts, severe precipitations or heat and cold waves has been well established. These changes have also an impact on the availability of water resources of the whole basin, affecting, not only river flows but also storage availability in lakes and reservoirs and snow cover. The ecological dynamics of the region is also greatly affected, as has been shown through satellite imagery and tree rings. This has an impact on the quality and quantity of crops and in the migration and welfare of animal populations. The marine environment is also affected by NAO through changes in sea level and fisheries dynamics. Other reported impacts are landslides, air pollution and human health.

OBJECTIVES

The NAO impacts on Northern Europe have been well reviewed and compiled, but no similar work has been done for the Mediterranean, which is the other key area impacted by NAO. The aim of the international workshop 'Hydrological, socioeconomic and ecological impacts of the North Atlantic Oscillation in the Mediterranean region' is to serve as meeting point for the experts in the different fields to review and update the evidences on the NAO impacts in the Mediterranean regions from a multidisciplinary approach. Particular attention will be paid to:

- Impacts on the occurrence of extreme events: droughts, severe precipitations, floods, heat and cold waves.
- Impact on surface and underground water resources.
- Impacts on renewable energies production: hydraulic, eolic and solar.
- Impacts on agriculture, including quality and quantity of crops and activity of vegetation in agricultural zones.
- Impacts on tourism, including 'snow' tourism, through the impact on snow cover and 'beach' tourism, through the impact on cloud cover and sun hours.
- Impacts on natural ecosystems, including forest dynamics and health and dynamics of animal populations.
- Impacts on geomorphology, including landslides and debris-flows, erosivity mechanisms and surface erosion processes.
- Impact on sea level
- Impact on air quality
- Impact on the quantity and quality of Mediterranean fisheries

ATTENDANTS

The workshop is targeted to:

- Leading scientists mainly from the MedCLIVAR community and related projects
- Young and training scientists who have recently contributed to the workshop themes
- PhD students and postdoctoral fellows working on topics relevant to the workshop themes

The participation of PhD 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 80.

CONFIRMED SPEAKERS

T. Osborn (Climatic Research Unit, UEA, UK)
E. Kahya (Istanbul Technical University, Turkey)
C. Barriocanal (Universitat de Girona, Spain)
D. Pozo-Vázquez (University of Jaen, Spain)
R. Meyer (Epuron GmbH-Germany)
C. Gouveia (University of Lisboa, Portugal)
S. Orlandini (University of Florence, Italy)
M. Beniston (University of Genève, Switzerland)

J. Camarero (Instituto Pirenaico de Ecología, CSIC-Spain)
J.L. Zezere (Universidade de Lisboa, Portugal)
M. Angulo (Estación Experimental de Aula Dei, CSIC-Spain)
F. Maynou (Instituto de Ciencias del Mar, CSIC-Spain)

CALL FOR CONTRIBUTIONS

Participants will be able to contribute through oral presentations and posters. Selected contributions will be published in a peer-reviewed book included in Science Citation Index.

DEADLINES FOR INSCRIPTION AND ABSTRACT SUBMISSION

Applications received by March, 12st 2010 will be considered for workshop participation. Information on subscription procedure in:

www.medclivar.eu and www.ipe.csic.es

LOCATION

The venue is the main hall of the University of Zaragoza. The conference centre hosts the main lecture hall of University, which also will provide space for the exhibition of posters and catering area.

Zaragoza is connected to the Spanish High Speed railway (Renfe's AVE), by the Madrid-Barcelona high-speed rail line. Madrid is reachable in 1 hour 15 minutes, and Barcelona in approximately 1 hour 30 minutes. The Zaragoza Airport has daily flights from/to Madrid, Paris, Frankfurt, Rome, Milan, London and Brussels. A number of rooms have been booked in hotels in Zaragoza at special rates for workshop participants.

