

The Abdus Salam International Centre for Theoretical Physics



Workshop on 'Reducing and Representing Uncertainites in High-Resolution Proxy Data'

June 9 - 11, 2008

Miramare-Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics (Abdus Salam ICTP) is organizing a co-sponsored *Workshop on 'Reducing & Representing Uncertainites in High-Resolution Proxy Data'*, to be held from June 9 to 11, 2008, in Trieste, Italy.

Introduction

Reconstructions of climate over the past few millennia using high-resolution climate proxy data provide vital benchmarks against which to test and refine climate models used for future climate prediction. A major opportunity exists to improve the quality and value of these climate reconstructions through a coordinated assessment of uncertainties in these proxies and how best to represent them, combined with development of coordinated strategies for future collection and integration of proxy data from key regions. The workshop will focus on climate proxies that have decadal or better temporal resolution, and their use in climate modeling and reconstruction efforts.

Different types of proxy data share many sources of uncertainty, including reproducibility, chronological control, and differing seasonal sensitivities, but each type of proxy is also associated with its own unique sources of uncertainties. By bringing together representatives of each proxy type to discuss the challenges associated with proxy uncertainties, we will take advantage of cross-cutting themes (how to represent uncertainties to the broader community? what types of data/metadata to supply to data centers?) while challenging each proxy group to devise coherent strategies of representing and reducing errors associated with their particular proxy.

Reliable reconstructions of past climate are significant tools for understanding global climate change. Techniques for reconstructing large-scale climate series and modeling such series have been proven. Such reconstructions and their interpretation can, however, only be as good as the contributing proxy climate data. We now have sufficient understanding of these various climate proxies and their limitations to strategically improve the global proxy climate database. This requires a coordinated international approach if we are to move forward rapidly.

Primary Workshop Goals:

- 1. Identify the main sources of uncertainty in the different types of proxy data.
- 2. Make recommendations for how to better represent proxy error to non-specialists.
- 3. Develop strategies for reducing uncertainties associated with each proxy type.

4. Develop internationally coordinated strategy for re-sampling existing key proxy sites and sampling new key sites for each climate proxy.

Invited international experts in the various climate proxies will be attending the Workshop.

PARTICIPATION

The activity is open to scientists from all member countries of the United Nations,



CO-SPONSORS







ORGANIZERS

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UNESCO and IAEA. Although the main purpose of the Abdus Salam ICTP is to help researchers from developing countries through a program based on international cooperation, *opportunities for students in the area of paleoclimate reconstruction and modeling from developing countries to attend*. Limited funds are available to support the attendance of such applicants, to be selected by the organizers. The activity will be conducted in English. *Registration is free-of-charge*.

APPLICATION

The "On-line Application" form can be accessed at: web form: <u>https://webform.ictp.it/LOGINS/login.mhtml?smr=1972</u> or web page address: <u>http://www.ictp.it/~smr1972</u> & ICTP agenda page: <u>http://cdsagenda5.ictp.trieste.it/full_display.php?smr=0&ida=a07181</u>

(Please save and upload file attachments in either: RTF format, <u>.doc</u> or <u>.PDF</u>)

Contact Information: Lisa Iannitti, c/o ICTP, Strada Costiera 11, 34014, Trieste, Italy ph: +39-040-2240 227, fax: +39-040-2240 558, e-mail: iannitti@ictp.it <u>http://www.ictp.it/</u> Deadline for Requesting funds <u>March 31, 2008</u>

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