

Advanced School on Data Assimilation June 7-11, 2010 Bologna, Italy

**Sponsored by
Centro Euro Mediterraneo per i Cambiamenti Climatici (CMCC) and
Gruppo Nazionale di Oceanografia Operativa (GNOO)**

ORGANIZERS

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LECTURERS

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OBJECTIVES

In the fields of oceanography, meteorology and climatology, the Data Assimilation (DA) combines in an optimal way observations and models. In the atmosphere DA is mature and developed, while in the recent years it has become the central part of operational oceanographic systems and climatological studies of the oceans. The DA School will describe the fundamental methods and techniques used in the DA and state of the art applications. Theoretical lectures will be followed by practical exercises. The school will cover Bayesian, variational and ensemble methods, and will present applications with operational DA systems and climatological data analysis.

TOPICS

The following topics will be discussed:

- Basic theoretical framework in DA
- Variational methods
- Bayesian and Ensemble methods
- Biases
- Impact of observations
- Applications of DA

ORGANIZATION OF LECTURES

The School will consist of frontal lectures given in the morning, and laboratory sessions in the afternoon. Each topic will be covered during one day of lectures and laboratory sessions. The working language will be English.

PARTICIPATION

It is required that the participants have an adequate knowledge of English. The number of participants is limited to 20 students. The registration fee of 300 euro is obligatory. A limited number of students can obtain financial support covering all expenses.

REQUESTS FOR PARTICIPATION

When applying the participants should send by e-mail a letter of interest and a C.V. Those participants who would like to obtain financial support should send by e-mail a letter of recommendation.

The e-mail address is: da@cmcc.it

The deadline for requesting participation is April 16 2010.

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