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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