WWRP/THORPEX WORKSHOP on 4D-VAR and ENSEMBLE KALMAN FILTER INTER-COMPARISONS

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Hosted by the School of Sciences of the University of Buenos Aires and the Center for Atmospheric and Ocean Research CIMA/CONICET

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Four dimensional variational data assimilation (4D-Var) introduced in the mid 80's, has grown from an initial theoretical formulation based on optimal control theory, to highly complex and successful implementations in operational numerical weather prediction (NWP) centers around the world.

About a decade after the introduction of 4D-Var, an original suggestion made by Evensen culminated with an attractive data assimilation procedure now known as the Ensemble Kalman Filter (EnKF). In the last decade, an increased interest in this approach has led to significant improvement in its theoretical foundations and practical implementations. Although 4D-Var and EnKF can be written in similar symbolic form, their specific theoretical and implementation limitations are of high interest and work is needed to clarify the methodologies in the face of complex operational implementations that are currently envisaged.

The primary purpose of the workshop is to encourage scientific discussions for a better understanding of the two data assimilation methods by current researchers in the field and to stimulate interest of younger scientists. The workshop will also focus on intercomparisons of the two methods in various contexts, incorporating both theoretical considerations as well as practical implementations, and with a special emphasis on atmospheric data assimilation. The discussions should therefore provide a solid scientific basis for supporting practical decisions eventually to be taken by meteorological agencies concerned.

The Workshop will be preceded by a 2 week intensive course on data assimilation for Latin American students and researchers.

INITIAL ANNOUNCEMENT- May 2007 http://4dvarenkf.cima.fcen.uba.ar

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