
NCAR
MMM* JOINT SEMINAR *RAL

**Review of the Development of the WRF-Var Data
Assimilation System and Results from Application in
NCAR's Data Assimilation Testbed Center**

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Abstract:

The community WRF model includes an advanced variational/ensemble data assimilation system known as WRF-Var. The WRF-Var system is the operational data assimilation system of the US Air Force Weather Agency (AFWA), as well as a number of WRF partners in Asia and the Middle East, and is also used by a growing number of research groups within academia.

This talk will begin with a brief review of the development path of WRF-Var over the past 8 years. Recent developments, including a hybrid variational/ensemble data assimilation technique, prototype 4D-Var capabilities, and an enhanced satellite radiance assimilation capability will be briefly described.

Operational implementation of any data assimilation system requires extensive testing prior to implementation to ensure robustness and statistically-significant estimates of the impact of changes to the data assimilation system. The Data Assimilation Testbed Center (DATC) was created in RAL's Joint Numerical Testbed (JNT) to provide such a resource for testing WRF data assimilation algorithms. Results from a variety of WRF testbeds will be presented to illustrate the contribution of the DATC in providing a bridge between research and operational data assimilation systems.

Thursday, 27 March 2008, 3:30 PM

Refreshments 3:15 PM

NCAR-Foothills Laboratory

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