

CAM-DART @AMWG 2010

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and collaborators to be named later

The Tool: Data Assimilation Research Testbed

- Ensemble Kalman Filter (Bayesian)
- Assimilates a variety of observations
 - Radiosonde
 - GPS
 - AIRS
 - some satellite
 - chemicals...)
- into several CAM versions
 - EUL and FV
 - 3.1, 3.5, CAM4, CAM5,...?).
- Assists with
 - model evaluation using CAM-based re-analyses,
 - model development using short-term tendencies,
 - creates initial conditions (with no foreign model error) for forecasts.

The Projects

- Year-long re-analyses with combinations of observations
- Dynamical core noise alerts and testing of solutions (Lauritzen)
- Initial conditions for 24 hour forecasts focusing on the Arctic for diagnosis of polar low cloud problem (Kay)
- Chemical assimilation of CO (Arellano)
- Assimilation of cloud properties into CAM and AM2 (Pincus)
- Providing coupler history files (CAM3.6.71) for use by future POP-DART assimilations which will require multiple atmospheric forcings for the ocean ensemble to create ICs for CCSM decadal predictions.

The Questions?