



Initial plans for ensemble development within JEDI at the Met Office

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The Met Office is in the process of moving to integrate our observation processing and data assimilation systems to use the Joint Effort for Data assimilation Infrastructure (JEDI). This allows us to reconsider the methods that we are using to produce the ensemble analyses and forecasts, both in the global and UK systems.

In the global system we are planning to move to a 4D-Var analysis for the control and update the perturbations using a 3DVar analysis. Some results on the validity of the control-pert method which underlies this will be shown. We will also move the powerful additive inflation system away from the analysis step in order to promote rapid perturbation growth.

For the regional system we intend to move the focus to very short-range forecasts (up to 24h maximum) as the effect of data assimilation is lost after that time. Thus, we will have two UK ensemble prediction systems. One will contain only small-scale perturbations and be focused on improving the short-range analysis. The other will be a regional downscaling system for the global forecasts and provide medium-range forecasts.

Thursday, 5 September 2024, 2:00PM

Refreshments 1:45PM

Please also join colleagues for refreshments and informal discussion after the seminar until 3:30pm

NCAR-Foothills Laboratory, 3450 Mitchell Lane
FL2-1022, Large Auditorium

Seminar will also be live webcast

<https://operations.ucar.edu/live-mmm>

Participants may ask questions during the seminar via Slido.