Séminaire vendredi le 17 novembre 2017 11:00 / Seminar Friday Nov 17th 2017 11:00h

Sujet/Subject: 4D Ensemble-Variational Data Assimilation System for High-Resolution NWP

Langue/language : Français/French

Conférencier/Lecturer: Joël Bédard (ARMA)

Résumé/Abstract:

The data assimilation component for a new short-term convective-scale numerical weather prediction (NWP) system covering most of Canada at 2.5 km resolution is currently being developed. It is based on a fully cycling deterministic 4DEnVar scheme with analysis increments initially computed at 10 km resolution. Several approaches have been evaluated and compared for generating ensembles of short-term forecasts for specifying the required background-error covariances. This includes ensembles from an EnKF and also from much simpler approaches. The new system is evaluated and compared with using Environment and Climate Change Canada's currently operational regional data assimilation system (with increments computed at 50 km resolution) for initializing forecasts from the identically configured atmospheric model.