

Séminaire Lundi 20 Août 11h00 / Seminar Monday August 20, 11:00 AM

Conférencier/Lecturer: Mark Buehner

Sujet/Subject: Update on the preparation of a global 4D-Var parallel system

Presentation: Anglais / English

Lieu/Room: Grande salle du premier étage CMC

RESUME / ABSTRACT

This informal presentation is intended for everyone interested in the ongoing project to introduce several new data types into the global 4D-Var analysis system. The new data include: AIRS, SSM/I, QuikScat and additional SatWind and AMSU data. Taken together, this represents approximately a 50% increase in the volume of assimilated data. In addition to the new data, the assimilation of all radiance data has been improved by upgrading the fast radiative transfer model (RTTOV), use of a new vertical interpolation scheme and implementation of an adaptive bias correction scheme. Finally, a change to the horizontal diffusion used in the upper sponge layer of GEM has been included. Results will be shown regarding both the combined impact of all changes and the individual impacts of each new data type or modification to the analysis system. In summary, according the results obtained to date, the combined impact of all proposed changes shows a consistent and significantly positive impact on medium-range forecasts for all regions.