

Séminaire lundi le 16 avr 2018 11:00 / Seminar Monday Apr 16th 2018 11:00h

Sujet/Subject: High Resolution Deterministic Prediction System (v5.0.0)

Langue/language : Anglais/English

Conférenciers/Lecturers: Jason Milbrandt (RPN-A)

Résumé/Abstract

A summary of major upgrades to the HRDPS and their individual and combined impacts on forecast skill will be presented. This seminar supports the upcoming proposal to CPOP for a parallel run of this new version as part of the “phase one” implementations. HRDPS_v5.0.0 will include the following upgrades:

- New meteorological piloting model (RDPS_v6.0.0 replaces RDPS_v5.0.0)
- New microphysics scheme (Predicted Particle Properties [P3] replaces Milbrandt-Yau [MY2])
- Inclusion of the Town Energy Balance (TEB) urban parameterization
- Minor modification to geophysical fields
- Upgrade to the atmospheric model (GEM_v4.9.2 replaces GEM_v4.8-LTS.13)

This new system version will be shown to outperform the current operational version (HRDPS_v4.4.0) for summer 2016 and winter 2017 runs in terms of standard skill scores for upper-air and near-surface fields. A brief outlook for what is planned for future HRDPS deliveries will also be presented.