

Séminaire **Jeudi** 17 avril 2014 11:00h / Seminar **Thursday** April 17th 2014 11:00h

Subject/ Sujet : Assimilation of radar QPE in the Canadian Precipitation Analysis (CaPA)

Conférencier/Lecturer: Vincent Fortin, Guy Roy, Norman Donaldson and Ahmed Mahidjiba

Abstract/Resumé :

The Canadian Precipitation Analysis (CaPA) is a data assimilation system used operationally at the Canadian Meteorological Center (CMC) to produce gridded precipitation estimates in near real-time on a 10 km grid covering all of North America. Due to the low density of the observational network in most of Canada, the system relies on a background field provided by the GEM numerical weather prediction (NWP) model, in addition to gauges. While the operational configuration of CaPA does not assimilate radar quantitative precipitation estimates (QPEs), an experimental version which does assimilate radar QPE is under development, and is expected to be operational in the fall of 2014. In the process of developing this new version of CaPA, a robust bias-correction and quality control procedure for radar QPE was put in place. In this paper, we describe this procedure and assess its impact on the skill of CaPA.