

**Séminaire 9 Decembre 2011 11h /Seminar December 9<sup>th</sup> 2011 11h**

**Conférencier/Lecturer:** Yves J. Rochon  
Jean de Grandpre, Yan Yang , Richard Menard.  
**Sujet/Subject:** Mise a jour sur les travaux en assimilation chimique variationelle  
à Environnement Canada / Update on the variational chemical  
assimilation capability at Environment Canada. .

**Présentation/Presentation:** Français / French

**Lieu/Room:** Salle des vents (Dorval)

**wiki:** [https://wiki.cmc.ec.gc.ca/wiki/RPN\\_Seminars](https://wiki.cmc.ec.gc.ca/wiki/RPN_Seminars)

**iweb:** <http://web-mrb.cmc.ec.gc.ca/mrb/rpn/SEM/>

**web:** <http://collaboration.cmc.ec.gc.ca/science/rpn/SEM/index.php>

Ozone assimilation at Environment Canada was initiated in the 1990's with the 3D variational assimilation system. Since then, different projects were undertaken in advancing our chemical assimilation and forecasting capability. This presentation provides a brief history, describe the current system and outline the plan for the next few years with focus on the variational system. Results of the recently completed ozone assimilation project financially supported by the Canadian Space Agency are also presented. Future developments will focus on incorporating ozone assimilation as part of the global variational assimilation and forecasting system applied as driver for the regional system. The intent is to provide reliable stratospheric ozone analyses and forecasts, as well as ozone boundary conditions for driving GEM-MACH, for improving regional UV index and air quality forecasting. The results will serve to determine whether this addition of global ozone assimilation and forecasting for these applications will be proposed for consideration toward operational implementation.