Séminaire ven 12 Fév 2010 11h / Seminar Fri Feb 12th 2010 11h

Conférencier/Lecturer: Stéphane Belair

Sujet/Subject: Système expérimental de prévision à

la surface pour les Jeux Olympiques

de Vancouver

Présentation/Presentation: Français / French

Lieu/Room: Salle des vents (Dorval)

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

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

Résume/Abstract

As part of Environment Canada's effort to provide state-of-the-art meteorological guidance for the 2010 Vancouver Olympic and Paralympic Games, two configurations of a newly-developed external land surface system have been prepared and applied over the Olympic region. The main goal of this new system is to refine and improve analysis and predictions at or near the land surface. For the Olympic application, focus is on improving surface snow conditions (depth, density, albedo) and screen-level air temperature. The two configurations are for i) high-resolution two dimensional land surface predictions (100-m grid size) and for ii) prediction at single points or locations, colocated with surface stations of the Olympic observational network. Initial conditions for the 2D system are obtained from a continuous integration of the external surface system driven with estimates for atmospheric forcing (no assimilation of surface data in this case). For the so-called "point" system, a simple assimilation strategy is used to specify snow depth initial conditions. Test results for the 2007/2008 and 2008/2009 winters will be presented. Prospects for a national expansion that could eventually be transferred to CMC-Operations will also be discussed.