**Wednesday 16 March 2011**

**Theme I: Statistical Downscaling (SD) methods – Chairman: André St-Hilaire**

9h00 – 9h15 **Welcoming remarks**
Van Thanh Van Nguyen (PI, McGill University)

9h15 – 9h30 **Introduction to the two-days’ workshop**
Philippe Gachon (co-PI, Environment Canada & UQÀM-ESCER)

9h30 – 9h50 **Evaluation of STARDEX climate indices for extremes using linearly and nonlinearly downscaled daily data**
Carlos Gaitan (UBC), William Hsieh (UBC) & Alex J. Cannon (EC-MSC)

9h50 – 10h10 **A Statistical approach to multi-site downscaling of daily precipitation and extreme temperature processes**
Malika Khalili (McGill University), Van T.V. Nguyen (McGill University) & Philippe Gachon (EC/UQÀM-ESCER)

10h10 – 10h30 **COFFEE BREAK**

10h30 – 10h50 **Generative topographic mapping for statistical downscaling**
Andrew Harding (McGill University-GEC3/EC), Philippe Gachon (EC/UQÀM-ESCER) & Van T.V. Nguyen (McGill University)

10h50 – 11h10 **Development of multi-site SD model over southern Quebec**
Dae-II Jeong (INRS-ETE), André St-Hilaire (INRS-ETE), Taha B.M.J. Ouarda (INRS-ETE) & Philippe Gachon (EC/UQÀM-ESCER)

11h10 – 11h25 **Generalized Extreme Values and climate covariates for downscaling of precipitation extremes**
Iris Klein (INRS-ETE), Taha B.M.J. Ouarda (INRS-ETE) & Xuebin Zhang (EC)

11h25 – 11h40 **Spatial bayesian method for downscaling of AOGCM predictors to minimum and maximum daily temperatures in Quebec**
Mohamed Ali Ben Alaya (INRS-ETE) Dominique Fasbender (INRS-ETE) & Taha B.M.J. Ouarda (INRS-ETE)

11h40 – 12h10 **Common comparison for SD over southern Québec**
Andrew Harding (McGill University-GEC3/EC) et al.

12h10 – 13h30 **LUNCH**

**Theme II: Regional Climate Models comparison - Chairman: René Laprise**

13h30 – 13h50 **Assessment of summer extremes and climate variability over the north-east of North America as simulated by the Canadian RCM**
Philippe Roy (UQÀM-ESCER), Philippe Gachon (EC/UQÀM-ESCER) & René Laprise (UQÀM-ESCER)

13h50 – 14h10 **Frequency analysis of extreme precipitation in southern Quebec: a comparison of Cubic Spline and ANUSPLIN spatially interpolated datasets**
Loubna Benyahya (UQÀM-ESCER), Philippe Gachon (EC/UQÀM-ESCER), René Laprise (UQÀM-ESCER) & André St-Hilaire (INRS-ETE)
Theme III: Regional climate scenarios and probabilistic information – Chairman: William Hsieh

14h10 – 14h30 Evaluation of various Regional Climate Model simulations based on observations over Canada (south of 60°N)
Milka Radojevic (McGill University-EC/EC) et al.

14h30 – 14h50 Comprehensive assessment of RCMs’ accuracy and optimal weighting factor for the Southern Québec region
Hyung-Il Eum (UQÀM-ESCER), Philippe Gachon (EC/UQÀM-ESCER) & René Laprise (UQÀM-ESCER)

14h50 – 15h10 Climate change scenarios from ensemble RCM & SD runs
Philippe Gachon (EC/UQÀM-ESCER) et al.

15h10 – 15h35 COFFEE BREAK

15h35 – 16h00 Probabilistic, nonlinear statistical downscaling models in R: The CaDENCE and qrnn packages
Alex J. Cannon (EC-MSC)

Discussion on the main outcomes of the NSERC-SRO project

16h00 – 16h15 Data and dissemination of results: P. Gachon (EC – AIRS)

16h15 – 16h40 New SD tools: Moderator: André St-Hilaire (INRS-ETE)

16h40 – 17h15 Regional climate information: Moderator: René Laprise (UQÀM-ESCER)

Thursday 17 March 2011

Downscaling initiatives in North America & abroad – Chairman: Van T.V. Nguyen

9h00 – 9h30 CORDEX, A Coordinated Regional Downscaling Experiment
René Laprise (UQÀM-ESCER)

Climate scenarios development and projected extremes in Canada – Chairman: Van T.V. Nguyen

9h30 – 9h50 The Canadian Climate Change Scenario Network (CCCSN)
Philippe Gachon (On behalf of Neil Comer, EC – AIRS)

9h50 – 10h20 Detecting Human Influence on Precipitation Extremes
Seung-Ki Min (EC - Climate Data and Analysis Section)

10h20 – 10h45 COFFEE BREAK

10h45 – 11h10 Projected changes to extreme precipitation characteristics over Canada - Naveed Khaliq (EC – AIRS)

Using climate scenarios in I&A studies – Chairman: Philippe Gachon

11h10 – 11h40 Developing climate scenarios for PARC’s private and public sector Partners
David Sauchyn (PARC, U. of Regina) & Elaine Barrow (U. of Regina)

11h40 – 12h10 Climate change scenarios for application in water resources impact and adaption assessment - Linda Mortsch (EC – AIRS)

12h10 – 13h30 LUNCH

13h30 – 15h00 Open discussion moderated by David Sauchyn and Linda Mortsch
  o Predictability of downscaling methods (extremes & variability)
  o Which downscaling tools for application in I&A research?
  o I&A application of raw versus probabilistic climate scenarios

15h00 – 15h20 COFFEE BREAK

15h20 – 15h45 Summary and concluding remarks