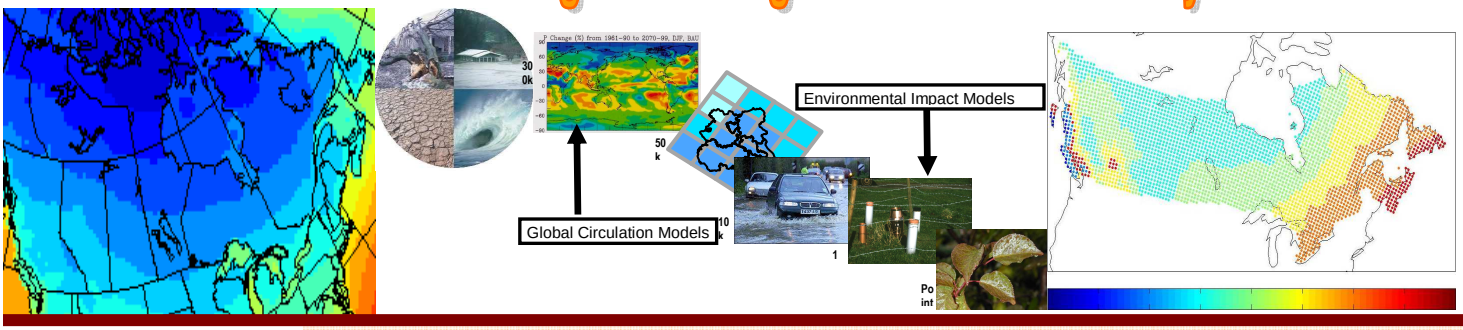
FINAL WORKSHOP PROGRAM

Probabilistic assessment of regional changes in climate variability and extremes



Wednesday 16 March 2011

Registrations open at 8h30

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)

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

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-Il 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)

LOCATION

New Residence Hall
Ballroom B
3625 Park Avenue
Montreal, Quebec
H2X 3P8

Theme III: Regional climate scenarios and probabilistic information – Chairman: William Hsieh

14h10 – 14h30	***Evaluation of various Regional Climate Model simulations based extremes over Canada (south of 60°N)*** Milka Radojevic (McGill University-GEC3/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 (UQAM-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**