

## Workshop Programme

### Sunday 3 May 2009

16.00-20.00 **Registration** at “Palaestra et Odeum” Conference Centre

### Monday, 4 May 2009

8:00 **Registration** at “Palaestra et Odeum” Conference Centre

9:00 **Opening**

**Prof. Per Eriksson**

*Vice Chancellor of Lund University*

**Dr. Bengt Holgersson**

*Chairman of the Swedish Government Commission on Climate and Vulnerability and former Governor of the County of Skåne*

**Dr. Rupa Kumar Kollu**

*Chief, World Climate Applications and Services Division, Climate Prediction and Adaptation Branch, Climate and Water Department, World Meteorological Organization*

**Session 1:** "Dynamical Downscaling"

*Chair:* *Burkhardt Rockel*

9:30 **Added value of limited area model results**

Frauke Feser, Hans von Storch, Jörg Winterfeldt and Matthias Zahn

9:50 **Settled and remaining issues in regional climate modelling with limited area nested models**

René Laprise, Ramón de Elia, Daniel Caya, Sébastien Biner, Philippe Lucas-Picher, Emilia Diaconescu, Martin Leduc, Adelina Alexandru, Leo Separovic and Alejandro di Luca

10:10 **Large-scale skill in regional climate modelling and the lateral boundary condition scheme**

Katarina Veljovic, Borivoj Rajkovic and Fedor Mesinger

10:30 **Coffee**

<i>Chair:</i>	<i>Hans von Storch</i>
10:50	<b>Incremental interpolation of coarse global forcings for regional model integrations</b> Kei Yoshimura and M. Kanamitsu
11:10	<b>Sensitivity of the simulated East Asian summer climatology to convective schemes using the NCEP regional spectral model</b> Hyun-Suk Kang, Song-You Hong and Won-Tae Kwon
11:30	<b>Impacts of the spectral nudging technique on simulation of the East Asian summer monsoon in 1991</b> Jianping Tang and Shi Song
11:50	<b>Assessment of dynamical downscaling in river basins in Japan using the Regional Atmospheric Modelling System (RAMS)</b> Koji Dairaku, Satoshi Iizuka, Wataru Sasaki, Roger A. Pielke Sr. and Adriana Beltran-Przekurat
12:10	<b>Investigation of added value at very high resolution with the regional climate model CCLM</b> Martin Suklitsch and Andreas Gobiet
12:30	<b>Lunch</b>
<i>Chair:</i>	<i>Claudio Mendenez</i>
14:00	<b>Errors of interannual variability and multi-decadal trend in dynamical regional climate downscaling and their corrections</b> Masao Kanamitsu, Kei Yoshimura, Yoo-Bin Yhang and Song-You Hong
14:20	<b>CLM coupled in the RegCM3 model: Preliminary results over South America</b> Rosmeri P. da Rocha, Santiago V. Cuadra, Julio Pablo Reyes Fernandez and Allison L. Steiner
14:40	<b>Influence of large-scale nudging on regional climate model simulations</b> Adelina Alexandru, Ramon de Elia, René Laprise, Leo Separovic and Sébastien Biner
15:00	<b>Development of a long-term climatology of North Atlantic polar lows using an RCM</b> Matthias Zahn and Hans von Storch
15:20	<b>Coffee and Posters for <u>Session 1</u> (see p. 9)</b>

<i>Chair</i>	<i>René Laprise</i>
16:50	<b>High-resolution dynamical downscaling error components over complex terrain</b> Andreas Gobiet, M. Suklitsch, A. Prein, H. Truhetz, N.K. Awan, H. Göttel and D. Jacob
17:10	<b>Dynamical downscaling: Assessment of model system dependent retained and added variability for two different regional climate models</b> Christopher L. Castro, Burkhardt Rockel, Roger A. Pielke Sr., Hans von Storch, and Giovanni Leoncini
17:30	<b>Regional climate model skill to develop small-scale transient eddies</b> Martin Leduc, René Laprise, Mathieu Moretti-Poisson and Jean-Philippe Morin
17:50	<b>Comparison of spatial filters and application to the ENSEMBLES regional climate model simulations</b> Erasmo Buonomo and Richard Jones
18:10	<b>Discussion</b>
<i>Chairs:</i>	<i>René Laprise and Hans von Storch</i>
18:30	<b>Closing for the Day</b>
19:00	<b>Icebreaker</b>

### **Tuesday, 5 May 2009**

9:00-12:00	<b><u>Breakout Groups and Parallel Working Group Sessions</u></b> <b><u>Venue: Geocentre</u></b>
9:00	Coordinated Regional Downscaling Experiment (CORDEX) for AR5 (Colin Jones)
9:00	BALTEX Working Group on Regional Climate Modelling (Markus Meier)
9:00	CLARIS LPB WP5: Regional Climate Change assessments for La Plata Basin with focus on surface-atmosphere interactions (Patrick Samuelsson)
9:00	WMO Commission for Climatology (CCl): Development of guidance for best practices in downscaling (Jean-Pierre Céron)
9:00	ENSEMBLES-AMMA (Markku Rummukainen)
12:00	<b>Lunch</b>
14:00-22:30	Excursion to Kopparhattan and Conference Dinner

## Wednesday, 6 May 2009

### Session 2: "New Developments in Numerics and Physical Parameterisations"

*Chair:* *Michel Dequé*

- 9:00 **Development of a climate model with dynamic grid stretching  
(Keynote Lecture)**  
William J. Gutowski Jr., Babatunde Abiodun, Joseph Prusa and Piotr Smolarkiewicz
- 9:30 **Evaluation of the land surface scheme HTESSEL with satellite derived surface energy fluxes at the seasonal time scale**  
Erik van Meijgaard, Louise Wipfler, Bart van den Hurk, Klaas Mestelaar, Jos van Dam, Reinder Feddes, Bert van Ulft, Sander Zwart and Wim Bastiaanssen
- 9:50 **Impact of surface waves in a regional climate model**  
Anna Rutgersson, Björn Carlsson, Alvaro Semedo and Øyvind Sætra
- 10:10 **Coffee**

*Chair:* *Raymond Arritt*

- 10:30 **A parameterisation of aircraft induced cloudiness in the CLM regional climate model**  
Andrew Ferrone, Philippe Marbaix, Ben Matthews, Ralph Lescroart and Jean-Pascal van Ypersele
- 10:50 **Simulating aerosol effects on the dynamics and microphysics of precipitation systems with spectral bin and bulk parameterisation schemes**  
Lai-Yung Ruby Leung, Alexander P. Khain and Barry Lynn
- 11:10 **Effects of numerical methods on high resolution modelling**  
Holger Göttel
- 11:30 **Overview over recent developments of COSMO-CLM numerics and physical parameterisations for high resolution simulations**  
Andreas Will and Ulrich Schättler

### Session 3: "From Weather to Climate"

*Chair:* *Jens H. Christensen*

- 11:50 **Weighting multi-models in seasonal forecasting – and what can be learnt for the combination of RCMs (Keynote Lecture)**  
Andreas P. Weigel, Mark A. Liniger and C. Appenzeller
- 12:20 **Investigation of ‘Hurricane Katrina’ type characteristics for future, warmer climates**  
Barry H. Lynn, Richard J. Healy and Leonard Druyan

12:40

**Lunch**

*Chair:*

*Richard Jones*

14:00

**Cut-off Low Systems: Comparison NCEP versus RegCM3**

Michelle Simoes Reboita, Raquel Nieto, Luis Gimeno, Rosmeri Porfirio da Rocha and Tercio Ambrizzi

14:20

**Dynamical downscaling of ECMWF experimental seasonal forecasts:  
Probabilistic verification**

Mirta Patarčić and Čedo Branković

14:40

**Relative role of domain size, grid size, and initial conditions in the  
simulation of high impact weather events**

Himesh Shivappa, P. Goswami and B. S. Goud

15:00

**An ensemble of regional climate change simulations**

Erik Kjellström, Grigory Nikulin, Lars Bärring, Ulf Hansson, Gustav Strandberg and Anders Ullerstig

15:20

**Effect of internal variability on regional climate change projections**

Klaus Keuler, Kai Radtke and Andreas Will

15:40

**Coffee and Posters for Sessions 2 (see p. 12), 3 (see p. 13) and 4 (see p. 15)**

**Session 4:**

"Regional Observational Data and Reanalysis"

*Chair:*

*Ole B. Christensen*

17:00

**The AMMA field campaign and its potential for model validation  
(Keynote Lecture)**

Jan Polcher and the AMMA partners

17:30

**Current climate downscaling at the National Center for Atmospheric  
Research (NCAR)**

Thomas Warner, Scott Swerdrup, Yubao Liu and Daran Rife

17:50

**Hindcasting Europe's climate – A user perspective**

Thomas Klein

18:10

**Satellite-based datasets for validation of regional climate models: The  
CM-SAF product suite and new possibilities for processing with 'climate  
data operators'**

Frank Kaspar, J. Schulz, P. Fuchs, R. Hollmann, M. Schröder, R. Müller,  
K.-G. Karlsson, R. Roebele, A. Riihelä, B. de Paepe, R. Stöckli and  
U. Schulzweida

18:30

***Closing for the Day***

***Afterwards: Guided City Walk (ca. 60 min), max. 20-30 participants***

**Thursday, 7 May 2009**

**Session 5:** "Results from Large Projects"

*Chair:* *Marku Rummukainen*

- 9:00      **Will future summer time temperatures go berserk?**  
Jens H. Christensen, Fredrik Boberg, Philippe Lucas-Picher and  
Ole B. Christensen
- 9:20      **The North American Regional Climate Change Assessment Program (NARCCAP): Status and results**  
Raymond W. Arritt
- 9:40      **Inter-comparison of Asian monsoon simulated by RCMs in Phase II of RMIP for Asia**  
Jinming Feng, Congbin Fu, Shuyu Wang, Jianping Tang, D. Lee, Y. Sato, H. Kato and J. McGregor
- 10:00     **Coffee**  
*Chair:* *Rupa Kumar Kolli*
- 10:30     **CLARIS Project: Towards climate downscaling in South America using RCA3**  
Claudio G. Menéndez, Anna Sörensson, Patrick Samuelsson, Ulrika Willén,  
Ulf Hansson, Manuel de Castro and Jean-Philippe Boulanger
- 10:50     **Regional climate model studies in CEOP: The Inter-Continental Transferability Study (ICTS)**  
Burkhardt Rockel, Beate Geyer, William J. Gutowski Jr., C.G. Jones,  
Z. Kodhavala, I. Meinke, D. Paquin and A. Zadra
- 11:10     **Overview of the research project of multi-model ensembles and downscaling methods for assessment of climate change impact, supported by MoE Japan**  
Izuru Takayabu
- 11:30     **AMMA-Model Intercomparison Project**  
F. Hourdin, J. Polcher, F. Guichard, F. Favot, J. P. Lafore, J. L. Redelsperger,  
P. M. Ruti, A. Dell'Aquila, T. Losada and A. K. Traoré
- 11:50     **Discussion**
- Chairs:* *Raymond Arritt, Rupa Kumar Kolli and Markku Rummukainen*
- 12:20     **Lunch**

Session 6: "The Future of RCMs"

*Chair:* *H. E. Markus Meier*

- 14:00 **A coupled regional climate model as a tool for understanding and improving feedback processes in Arctic climate simulations**  
Wolfgang Dorn, Klaus Dethloff and Annette Rinke
- 14:20 **Development of a Regional Arctic Climate System Model (RACM)**  
John Cassano, Wieslaw Maslowski, William Gutowski and Dennis Lettenmeier
- 14:40 **Arctic regional coupled downscaling of recent and possible future climates**  
Ralf Döscher, T. Königk, K. Wyser, H. E. Markus Meier and P. Pemberton
- 15:00 **Numerical modelling of trace species cycles in regional climate model systems**  
Baerbel Langmann
- 15:20 **Regional climate simulation with mosaic GCMs**  
Michel Déqué
- 15:40 **Coffee and Posters for Sessions 5 (see p. 16) and 6 (see p. 18)**

Session 7: "Impact Studies"

*Chair:* *Lars Bärring*

- 17:10 **Future challenges for regional coupled climate and environmental modelling in the Baltic Sea Region**  
H. E. Markus Meier, Thorsten Blenckner, Boris Chubarenko, Anna Gårdmark, Bo G. Gustafsson, Jonathan Havenhand, Brian MacKenzie, Björn-Ola Linnér, Thomas Neumann, Urmas Raudsepp, Tuija Ruoho-Airola, Jan-Marcin Weslawski and Eduardo Zorita
- 17:30 **Climate change impact assessment in central and eastern Europe: The CLAVIER project**  
Susanne Pfeifer, Daniela Jacob, Gabor Balint, Dan Balteanu, Andreas Gobiet, Andras Horanyi, Laurent Li, Franz Pretenthaler, Tamas Palvolgyi and Gabriella Szépszó
- 17:50 **Climate change impacts on extreme wind speeds**  
Sara C. Pryor, R. J. Barthelmie, N. E. Claussen, N. M. Nielsen, E. Kjellström and M. Drews
- 18:10 ***Closing for the Day***
- Afterwards: Guided City Walk (ca. 60 min), max. 20-30 participants*

**Friday, 8 May 2009**

**Session 7** Continued

*Chair:* *Benjamin Smith*

9:00 **Dynamical downscaling of urban climate using CReSiBUC with inclusion of detailed land surface parameters**  
Kenji Tanaka, Kazuyoshi Souma, Takahiro Fujii and Makoto Yamauchi

9:20 **Projected changes in daily temperature variability over Europe in an ensemble of RCM simulations**  
Grigory Nikulin, Erik Kjellström and Lars Bärring

9:40 **Coffee and Posters for Session 7 (see p. 19)**

10:40 **Influence of soil moisture near-surface temperature feedback on present and future climate simulations over the Iberian Peninsula**  
Sonia Jerez, J. P. Montavez, P. Jimenez-Guerrero, J. J. Gomez-Navarro and J. F. Gonzalez-Rouco

11:00 **The impact of land use change at Shan Gan Ning border areas on climate with RegCM3 Study**  
Xueli Shi, Yiming Liu and Jianping Liu

11:20 **Simulating cold palaeo-climate conditions in Europe with a regional climate model**  
Gustav Strandberg, Jenny Brandefelt, Erik Kjellström and Benjamin Smith

11:40 **Discussion**

*Chairs:* *Lars Bärring and Benjamin Smith*

12:00 ***Closing of the Workshop***

12:30 ***Lunch and Departure***

## Poster Discussions

**Monday, 4 May 2009, 15:20 –16:50**

### Session 1: Dynamical Downscaling

Poster S1-081

**A comparison of RCM performance for the eastern Baltic region and the application of the histogram equalisation method for RCM outputs**

Uldis Bethers, Juris Seņņikovs and Andrejs Timuhins

Poster S1-157

**Improvement of long-term integrations by increasing RCM domain size**

Sin Chan Chou, André Lyra, José Pesquero, Lincoln Alves, Gustavo Sueiro, Diego Chagas, José Marengo and Vladimir Djurdjevic

Poster S1-060

**Sensitivity study of CRCM-simulated climate change projections**

Ramón De Elía and Hélène Côté

Poster S1-152

**Regional precipitation anomalies in the eastern Amazon as depicted by observations and REGCM3 simulations**

Everaldo B. De Souza, Marcio N. G. Lopes and Alan C.Cunha

Poster S1-058

**Assessment of precipitation as simulated by an RCM and its driving data**

Alejandro Di Luca, Ramón de Elía and René Laprise

Poster S1-019

**The Asian summer monsoon in ERA40 driven CLM simulations**

Andreas Dobler and Bodo Ahrens

Poster S1-030

**Sensitivity of CRCM basin annual runoff to driving data update frequency**

Anne Frigon and Michel Slivitzky

Poster S1-125

**Climate change projections for the XXI century over the Iberian peninsula using dynamic downscaling**

Juan José Gómez-Navarro, J.P. Montávez, S. Jerez and P. Jiménez-Guerrero

Poster S1-143

**Regional climate change scenarios – benefits of modelling in high resolution for Central and eastern Europe in the project CECILIA**

Tomas Halenka, Michal Belda and Jiri Miksovsky

Poster S1-040

**Climatological feature and heating mechanism of the Foehn phenomena over the north of the central mountain range in Japan by using non-hydrostatic RCM**

Noriko Ishizaki and Izuru Takayabu

Poster S1-004

**Study of climate change over the Caspian Sea basin using the climate model PRECIS at 2071-2100**

Maryam Karimian, Iman Babaeien and Rahele Modirian

Poster S1-057

**Performance of pattern scaling in estimating local changes for untried GCM-RCM pairs: Implications for ensemble design**

Elizabeth Kendon

Poster S1-139

**Evaluation of the analyzed large-scale features in a global data assimilation system due to different convective parameterisation schemes and their impact on downscaled climatology using a RCM**

Jung-Eun Kim and Song-You Hong

Poster S1-036

**Sensitivity studies with a statistical downscaling method, the role of the driving large scale model**

Frank Kreienkamp, Arne Spekat and Wolfgang Enke

Poster S1-102

**MPI regional climate model REMO simulations over South Asia**

Pankaj Kumar, Ralf Podzun and Daniela Jacob

Poster S1-141

**Evaluation of dynamical downscaling of the East Asian regional climate using the HadGEM3-RA: Summer monsoon of 1997 and 1998**

Johan Lee, Suhee Park, Wilfran Moufouma-Okia, David Hassell, Richard Jones, Hyun-Suk Kang, Young-Hwa Byun and Won-Tae Kwon

Poster S1-166

**Interpolating temperature fields using static and dynamic lapse rates**

Chris Lennard

Poster S1-077

**Regional modelling of climate and extremes in southeast China**

Laurent Li, Weilin Chen and Zhihong Jiang

Poster S1-147

**Investigation of regional climate models' internal variability with a ten-member ensemble of ten-year simulations over a large domain**

Philippe Lucas-Picher, Daniel Caya, Ramón de Elía, Sébastien Biner and René Laprise

Poster S1-061

**Selected examples of the added value of regional climate models**

H. E. Markus Meier, Lars Bärring, Ole Bössing Christensen, Erik Kjellström, Philip Lorenz, Burkhardt Rockel and Eduardo Zorita

Poster S1-039

**Climate change in Europe simulated by the regional climate model COSMO-CLM**

Kai S. Radtke and Klaus Keuler

Poster S1-120

**Simulation of South Asian summer monsoon dynamics using REMO**

Fahad Saeed, Stefan Hagemann and Daniela Jacob

Poster S1-045

**Analysis of precipitation changes in central Europe within the next decades based on simulations with a high resolution RCM ensemble**

Gerd Schädler, Hendrik Feldmann and Hans-Jürgen Panitz

Poster S1-091

**Sensitivity studies of model setup in the alpine region using MM5 and RegCM**

Irene Schicker, Imran Nadeem and Herbert Formayer

Poster S1-132

**Parameter perturbation study with the GEM-LAM: The issue of domain size**

Leo Separovic, Ramon de Elia and René Laprise

Poster S1-047

**Modelling climate over Russian regions: RCM validation and projections**

Igor Shkolnik, S. Efimov, T. Pavlova and E. Nadyozhina

Poster S1-128

**Is the position of the model domain over the target area related to the results of a regional climate model?**

Kevin Sieck, Philip Lorenz and Daniela Jacob

Poster S1-165

**Estimating the Mediterranean Sea water budget: Impact of the design of the RCM**

Samuel Somot, Nellie Elguindi, Emilia Sanchez-Gomez, Marine Herrmann and Michel Déqué

Poster S1-053

**Comparison of climate change over Europe based on global and regional model**

Lidija Srnec, Mirta Patarčić and Čedo Branković

Poster S1-068

**A general approach for smoothing on a variable grid**

Dorina Surcel and René Laprise

Poster S1-044

**What details can the regional climate models add to the global projections in the Carpathian Basin?**

Gabriella Szépszó, Gabriella Csima and András Horányi

Poster S1-069

**Investigation of precipitation over contiguous China using the Weather Research and Forecasting (WRF) model**

Jian Tang and Jianping Tang

Poster S1-104

**Extremes and predictability in the European pre-industrial climate of a regional climate model**

Lorenzo Tomassini, Ch. Moseley, A. Haumann, R. Podzun, and D. Jacob

Poster S1-111

**Does dynamical downscaling with regional atmospheric models add value to surface marine wind speed from re-analyses?**

Jörg Winterfeldt and Ralf Weisse

Poster S1-100

**Present climate simulations (1982-2003) of precipitation and surface temperature using the RegCM3, RSM and WRF**

Yoo-Bin Yhang, Kyo-Sun Lim, E-Hyung Park and Song-You Hong

**Wednesday, 6 May 2009, 15:30 –16:50**

**Session 2: New Developments in Numerics and Physical Parameterisations**

Poster S2-063

**Examining the relative roles of precipitation and cloud material feedback generated by convective parameterisation**

Christopher J. Anderson

Poster S2-136

**Dynamical coupling of the HIRHAM regional climate model and the MIKE SHE hydrological model**

Martin Drews, Søren H. Rasmussen, Jens Hesselbjerg Christensen, Michael B. Butts, Jesper Overgaard, Sara Maria Lerer and Jens Christian Refsgaard

Poster S2-130

**Stratospheric variability and its impact on surface climate**

Andreas Marc Fischer, Isla Simpson, Stefan Brönnimann, Eugene Rozanov and Martin Schraner

Poster S2-001

**Study of the capability of the RegCM3 in the simulation of precipitation and temperature over the Khorasan Razavi province, case study: Winters of 1991-2000**

Maryam Karimian, Iman Babaeian and Rahele Modirian

Poster S2-002

**Simulation of precipitation and temperature over the Khorasan province using Reg CM3, case study: Autumns 1991-2000**

Rahele Modirian, Iman Babaeian and Maryam Karimian

Poster S2-107

**Diffusion impact on atmospheric moisture transport**

Christopher Moseley, J. Haerter, H. Göttel, G. Zängl, S. Hagemann and D. Jacob

Poster S2-009

**Climate simulations over North America with the Canadian Regional Climate Model (CRCM): From operational Version 4 to developmental Version 5**

Dominique Paquin, René Laprise, Katja Winger, Ramon de Elia, Ayrton Zadra and Bernard Dugas

Poster S2-029

**Soil organic layer: Implications for Arctic present-day climate and future climate changes**

Annette Rinke, Peter Kuhry and Klaus Dethloff

Poster S2-156

**Sensitivity of a regional climate model to physics parameterisations: Simulation of summer precipitation over East Asia using MM5**

Shi Song and Jian-ping Tang

Poster S2-020

**Evaluation of the Rossby Centre Regional Climate model (RCA) using satellite cloud and radiation products**

Ulrika Willen

Poster S2-028

**Simulating aerosols in the regional climate model CCLM**

Elias Zubler, Ulrike Lohmann, Daniel Lüthi, Andreas Mühlbauer and Christoph Schär

Session 3: From Weather to Climate

Poster S3-181

**Moisture availability and the relationship between daily precipitation intensity and surface temperature**

Peter Berg, Jan Haerter, Peter Thejll, Claudio Piani, Stefan Hagemann and Jens Hesselbjerg Christensen

Poster S3-180

**Temperature and precipitation scenarios for the Caribbean from the PRECIS regional climate model**

Jayaka Campbell, M. A. Taylor, T. S. Stephenson, F. S. Whyte and R. Watson

Poster S3-094

**Use of the Weather Research and Forecasting Model (WRF): Towards improving warm season climate forecasts in North America**

Christopher L. Castro and Francina Dominguez

Poster S3-119

**Modelling of the Atlantic tropical cyclone activity with the RegCM3**

Daniela Cruz-Pastrana, Ernesto Caetano and Rosmeri Porfirio da Rocha

Poster S3-129

**Regional modelling of recent changes in the climate of Svalbard and the Nordic Arctic (1979-2001): Comparing RCM output to meteorological station data**

Jonathan Day, Jonathan Bamber, Paul Valdes and Jack Kohler

Poster S3-072

**Effects of variations in climate parameters on evapotranspiration in the arid and semi-arid regions**

Saeid Eslamian, Mohammad Javad Khordadi, Arezou Baba Ahmadi and Jahangir Abedi Koupai

Poster S3-127

**Regional climate change projections using a physics ensemble over the Iberian Peninsula**

Pedro Jiménez Guerrero, S. Jerez, J.P. Montavez, J.J. Gomez-Navarro, J.A. García-Valero and J.F. Gonzalez-Rouco

Poster S3-092

**Detailed assessment of climate variability of the Baltic Sea for the period 1950/70-2008**

Andreas Lehmann, Klaus Getzlaff, Jan Harlass and Karl Bumke

Poster S3-048

**Diurnal variation of precipitation over central eastern China simulated by a regional climate model (CREM)**

Jian Li, Rucong Yu, Tianjun Zhou, Wei Huang and Hongbo Shi

Poster S3-085

**Evaluation of seasonal forecasts over the northeast of Brazil using the RegCM3**

Rubinei Dorneles Machado and Rosmeri Porfírio da Rocha

Poster S3-012

**An evaluation of surface radiation budget over North America in a suite of regional climate models**

Marko Markovic, C.G. Jones, P. Vaillancourt, K. Winger and D. Paquin

Poster S3-003

**Climate change assessment over Iran during future decades by using the MAGICC-SCENGEN model**

Majid Habibi Nokhandan, Fatemeh Abassi, Azade Goli Mokhtari and Iman Babaeian

**Session 4: Regional Observational Data and Reanalysis**

Poster S4-173

**High-resolution simulation of a windstorm event to assess sampling characteristics of windstorm measures based on observations**

Lars Bärring, Włodzimierz Pawlak, Krzysztof Fortuniak and Ulf Andrae

Poster S4-109

**MesoClim – A mesoscale alpine climatology using VERA-reanalyses**

Benedikt Bica, Stefan Sperka and Reinhold Steinacker

Poster S4-101

**Observed and modeled extremes indices in the CECILIA project**

Ole B. Christensen, Fredrik Boberg, Martin Hirschi, Sonia Seneviratne, and Petr Stepanek

Poster S4-079

**Dynamical downscaling of surface wind circulations over complex terrain**

Pedro A. Jiménez, J. Fidel González-Rouco, Juan P. Montávez, E. García-Bustamante and J. Navarro

Poster S4-098

**JP10: 59-year 10 km dynamical downscaling of re-analysis over Japan**

Hideki Kanamaru, Kei Yoshimura, Wataru Ohfuchi, Kozo Ninomiya, and Masao Kanamitsu

Poster S4-113

**Reflection of shifts in upper-air wind regime in surface meteorological parameters in Estonia during recent decades**

Sirje Keevallik and Tarmo Soomere

Poster S4-010

**Regional features of recent climate change in Europe: The aggregated index approach**

Valeriy Khokhlov and Lyndmila G. Latysh

Poster S4-055

**Analysis of surface air temperatures over Ireland from reanalysis Data and observational Data**

Priscilla A. Mooney, Frank J. Mulligan and Rowan Fealy

Poster S4-170

**Environment database and the Geographic Information System for socio-economic planning**

Olakunle Francis Omidiora and Balogun Ahmed

Poster S4-145

**Climate change and water pollution interactions in the Republic of Belarus**

Veranika Selitskaya and Alena Kamarouskaya

Poster S4-096

**Current-climate downscaling of winds and precipitation for the Eastern Mediterranean**

Scott Swerdrin, Thomas Warner, Andrea Hahmann, Dorita Rostkier-Edelstein and Yubao Liu

**Thursday 7 May 2009, 15:40-17:00**

**Session 5: Results from Large Projects**

Poster S5-112

**Verification of simulated near surface wind speeds by a multi model ensemble with focus on coastal regions**

Ivonne Anders, Hans von Storch and Burkhardt Rockel

Poster S5-083

**MRED: Multi-RCM ensemble downscaling of global seasonal forecasts**

Raymond W. Arritt

Poster S5-150

**An atmosphere-ocean regional climate model for the Mediterranean area: Present climate and XXI scenario simulations**

V. Artale, S. Calmanti, A. Carillo, A. Dell'Aquila, M. Herrmann, G. Pisacane, PM Ruti, G. Sannino, MV Struglia, F. Giorgi, X. Bi, J.S. Pal and S. Rauscher

Poster S5-164

**Regional climate modelling in Morocco within the project IMPETUS Westafrica**

Kai Born, H. Paeth, K. Piecha, and A. H. Fink

Poster S5-038

**Arctic regional coupled downscaling of recent and possible future climates**

Ralf Döscher, T. Königk, K. Wyser, H. E. Markus Meier and P. Pemberton

Poster S5-046

**An atmosphere-ocean coupled model for the Mediterranean climate simulation**

Alberto Elizalde, Daniela Jacob and Uwe Mikolajewicz

Poster S5-179

**From droughts to floods: A statistical assessment from RCM**

Sandra G. Garcia and J.D. Giraldo

Poster S5-144

**On the validation of RCMs in terms of reproducing the annual cycle**

Tomas Halenka, Petr Skalak and Michal Belda

Poster S5-097

**Projection of the changes in the future extremes over Japan using a cloud-resolving model (JMA-NHM): Change in heavy precipitation**

Sachie Kanada, M. Nakano, M. Nakamura, S. Hayashi, T. Kato, H. Sasaki, T. Uchiyama, K. Aranami, Y. Honda, K. Kurihara and A. Kitoh

Poster S5-178

**Predicting water resources in West Africa for 2050**

Harouna Karambiri, S. Garcia, H. Adamou, L. Decroix, A. Mariko, S. Sambou and E. Vissin

Poster S5-041

**Evaluation of European snow cover as simulated by an ensemble of regional climate models**

Sven Kotlarski, Daniel Lüthi and Christoph Schär

Poster S5-013

**Projections of the eastern Mediterranean climate change simulated in a transient RCM experiment with RegCM3**

Simon Krichak, Pinhas Alpert and Pavel Kunin

Poster S5-151

**Atmospheric river induced heavy precipitation and flooding in the NARCCAP simulations**

Lai-Yung Ruby Leung and Yun Qian

Poster S5-050

**Intra-seasonal evolution of the West African monsoon: Results from multiple RCM simulations**

Neil MacKellar, Philippe Lucas-Picher, Jens H. Christensen and Ole B. Christensen

Poster S5-169

**Influence of soil moisture initialisation on regional climate model simulations of the West African monsoon**

Wilfran Moufouma-Okia and Dave Rowell

Poster S5-067

**Projection of the changes in the future extremes over Japan using a cloud-resolving model (JMA-NHM): Model verification and first results**

Masuo Nakano, S. Kanada, M. Nakamura, S. Hayashi, T. Kato, H. Sasaki, T. Uchiyama, K. Aranami, Y. Honda, K. Kurihara and A. Kitoh

Poster S5-163

**ENSEMBLES regional climate model simulations for Western Africa (the “AMMA” region)**

Markku Rummukainen, Filippo Giorgi and the ENSEMBLES RT3 participants

Poster S5-052

**Assessing the performance of seasonal snow in the NARCCAP RCMs – An analyses for the upper Colorado river basin**

Nadine Salzmann and Linda Mearns

Poster S5-082

**Applying the Rossby Centre Regional Climate Model (RCA3.5) over the ENSEMBLES-AMMA region: Sensitivity studies and future scenarios**

Patrick Samuelsson, Ulrika Willén, Erik Kjellström and Colin Jones

Poster S5-084

**Interactions between European shelves and the Atlantic simulated with a coupled regional atmosphere-ocean-biogeochemistry model**

Dmitry V. Sein, Joachim Segschneider, Uwe Mikolajewicz and Ernst Maier-Reimer

Poster S5-089

**ALADIN-Climate/CZ simulation of the 21<sup>st</sup> century climate in the Czech Republic for the A1B emission scenario**

Petr Skalak, Petr Stepanek and Ales Farda

Poster S5-035

**Simulation of Asian monsoon climate by RMIP Models**

Shuyu Wang, Jinming Feng, Zhe Xiong and Congbing Fu

## Session 6: The Future of RCMs

Poster S6-142

### **Use of regional climate models in regional attribution studies**

Christopher J. Anderson, William J. Gutowski, Jr., Martin P., Hoerling and Xiaowei Quan

Poster S6-133

### **Wave estimations using winds from RCA, the Rossby regional climate model**

Barry Broman and Ekaterini E. Kriezi

Poster S6-074

### **A regionally coupled atmosphere-ocean and sea ice model of the Arctic**

Ksenia Glushak, Dmitry Sein and Uwe Mikolajewicz

Poster S6-075

### **Convection-resolving regional climate modelling and extreme event statistics for recent and future summer climate**

Christoph Knote, Günther Heinemann and Burkhardt Rockel

Poster S6-149

### **The impact of atmospheric thermodynamics on local climate change predictability:**

### **A plea for very high resolution climate modelling**

Geert Lenderink and E. van Meijgaard

Poster S6-135

### **Chances of the global-regional two-way nesting approach**

Philip Lorenz and Daniela Jacob

Poster S6-148

### **Very high-resolution regional climate simulations over Greenland with the HIRHAM model**

Philippe Lucas-Picher, Jens H. Christensen, Martin Stendel and Gudfinna Aðalgeirsdóttir

Poster S6-124

### **Time invariant input parameter processing for applications in the COSMO-CLM Model**

Gerhard Smiatek, Goran Georgievski and Hermann Asensio

Poster S6-103

### **Impact of convective parameterisation on high resolution precipitation climatology using WRF for Indian summer monsoon**

Sourav Taraphdar, P. Mukhopadhyay, B. N. Goswami and K. Krishnakumar

Poster S6-117

### **Development of a regional ocean-atmosphere coupled model and its performance in simulating the western North Pacific Summer monsoon**

Liwei Zou, Tianjun Zhou and Rucong Yu

**Friday, 8 May 2009, 09:40-11:40**

**Session 7: Impact Studies**

Poster S7-018

**Regional climate change impact studies in the upper Danube and upper Brahmaputra river basin using CLM projections**

Bodo Ahrens and Andreas Dobler

Poster S7-070

**River runoff projection of future climate in Latvia**

Elga Apsīte, Anda Bakute and Līga Kurpniece

Poster S7-026

**Application of regional-scale climate modelling to account for climate change in the hydrological design for dam safety in Sweden**

Sten Bergström, Johan Andréasson and L. Phil Graham

Poster S7-108

**Local air mass dependence of extreme temperature minima in the Gsteineralm Sinkhole with regard to global climate change**

Benedikt Bica and Reinhold Steinacker

Poster S7-024

**Impact of vegetation on the simulation of seasonal Monsoon rainfall over the Indian region using a regional model**

Surya Kanti Dutta, Someshwar Das, S.C. Kar, V.S. Prasad and Prasanta Mali

Poster S7-016

**Climate change impacts on the water quality: A case study of the Rosetta Branch in the Nile Delta, Egypt**

Alaa El-Sadek

Poster S7-033

**Direct radiative forcing of various aerosol species over East Asia with a coupled regional climate/chemistry model**

Zhiwei Han

Poster S7-160

**Forest damage in a changing climate**

Anna Maria Jönsson and Lars Bärring

Poster S7-146

**Climate change and air pollution interactions in the Republic of Belarus**

Alena Kamarouskaya and Aliksandr Behanski

Poster S7-177

**Linking climate factors and adaptation strategies in the rural Sahel-Sudan zone of West Africa**

Ole Mertz, Cheikh Mbow , Jonas Ø. Nielsen, Abdou Maiga, Alioune KA, Rissa Diallo, Pierre Cissé, Drissa Coulibaly, Bruno Barbier, Dapola DA, Tanga Pierre Zoungrana, Ibrahim Bouzou Moussa, Waziri Mato Maman, Boureima Amadou, Addo Mahaman, Alio Mahaman, Amadou Oumarou, Daniel Dabi, Vincent Ihemegbulem, Awa Diouf, Malick Zoromé, Ibrahim Ouattara, Mamadou Kabré, Anette Reenberg, Kjeld Rasmussen and Inge Sandholt

Poster S7-014

**Winter storms with high loss potential in a changing climate from a regional point of view**

Monika Rauthe, Michael Kunz and Susanna Mohr

Poster S7-043

**Numerical investigations into the impact of urbanisation on tropical mesoscale events**

Himesh Shivappa, P. Goswami and B.S. Goud

Poster S7-137

**Observation and simulation with RegCM3 for the 2005-2006 rainy season over the southeast of Brazil**

Maria Elisa Siqueira Silva and Diogo Ladvocat Negrão Couto

Poster S7-176

**Coupling climate and crop models**

Benjamin Sultan, A. Alhassane, P. Oettli, S. Traoré, C. Baron, B. Muller, M. Dingkuhn

Poster S7-140

**Streamflow in the upper Mississippi river basin as simulated by SWAT driven by 20C results of NARCCAP regional climate models**

Eugene S. Takle, M. Jha, E. Lu, R.W. Arritt , W. J. Gutowski, Jr and the NARCCAP Team

Poster S7-115

**Impact of megacities on the regional air quality: A South American case study**

Claas Teichmann and Daniela Jacob

Poster S7-090

**Validation of RCM simulations using a conceptual runoff model**

Claudia Teutschbein and Jan Seibert

Poster S7-022

**Impacts of vegetation on the global water and energy budget as represented by the Community Atmosphere Model (CAM3)**

Zhongfeng Xu and Congbin Fu