

# ADSIMNOR-CORDEX workshop on Arctic climate modeling results and needs

at SMHI, Norrköping/Sweden

March 20-21, 2012

## Program

1 <sup>st</sup> day, Tuesday			
09:00 - 09:45			Start session
09:00	Ralf Döscher	SMHI	Welcome to SMHI
09:05	John and Ralf		Purpose of the workshop
09:15	Ralf Döscher	SMHI	What is ADSIMNOR ?
09:30	Colin Jones	SMHI	Update on CORDEX
09:40	John Cassano	CIRES	Introduction to Polar CORDEX
09:55 – 10:55 including a coffee break			Regional Arctic atmosphere modelling in CORDEX
15+5 min	Patrick Samuelsson	SMHI	CORDEX simulations with SMHIs RCA regional climate model
15+5 min	Torben Königk and Patrick Samuelsson	SMHI	Rosby Centre CORDEX simulations for the Arctic: hindcast and scenarios
10:55 – 12:20			Coupled Arctic modelling
15+5 min	Maslowski, Wieslaw	Naval Postgraduate School	Regional Arctic Climate Model – A Tool for Improved Prediction of Arctic Climate Feedbacks
20+5 min	John Cassano	CIRES	Comparison of atmosphere-land and coupled atmosphere-ocean sea ice-land Arctic CORDEX simulations
15+5 min	Ralf Döscher	SMHI	SMHIs coupled Arctic climate model RCAO
15+5 min	Dmitry Sein	MPI	Multi-domain ensemble simulations of Arctic climate variability with the regionally coupled AO
12:20 – 12:40			Model verification 1
15+5 min	Roberts, Andrew	Naval Postgraduate School	Evaluation metrics of sea ice drift for high-fidelity coupled models.
12:40 – 13:40			Lunch in SMHIs restaurant
13:40 – 14:20			Model verification 2
15+5 min	Duane Waliser	JPL	A Regional Climate Model Evaluation System based on contemporary Satellite and other Observations for Assessing Regional Climate Model Fidelity
15+5 min	Chris Mattmann	JPL	Enabling rapid, scalable and effective comparison of model outputs with remote sensing data using the Regional Climate Model Evaluation System (RCMES)
14:20 – 16:00 including a coffee break	Discussion session (John Cassano)		CORDEX coordination discussion, including <ul style="list-style-type: none"> <li>– common strategies for model verification</li> <li>– joint scenario analysis?</li> <li>– Observational needs for model verification</li> </ul>
16:00 – 17:20			Arctic system modelling
15+5 min	Laura Niederdrenk	MPI	Modeling the Arctic hydrologic cycle

15+5 min	Per Pemberton	Stockholm university	Arctic ocean freshwaterbudget
15+5 min	Ben Smith	Lund university	On Arctic vegetation
15+5 min	Wenxin Zhang	Lund university	Arctic potential natural vegetation changes driven by climate projections from the regional coupled ocean-atmosphere model RCAO
19:00			Workshop dinner in Town
			<b>2<sup>nd</sup> day, Wednesday</b>
09:00 – 11:05 incl. a coffee break			From the globe to the Arctic
15+5 min	Rune Grand-Gravesen	Stockholm university	On the linkage between atmospheric circulation changes and Arctic sea-ice melt.
15+5 min	Peter Langen	Copenhagen university	Separation of radiative feedback contributions to polar amplification (based on the NCAR CAM3 and ECHAM6 models)
15+5 min	Marie Kapsch	Stockholm university	Increase of the Arctic greenhouse effect causes recent summer sea-ice retreat (based on reanalysis ??)
15+5 min	Richard Bintanja, given by R. Grand-Gravesen	KNMI	EC-Earth in idealized climate change experiments to quantify the individual contributions of the surface and the atmosphere to infrared
15+5 min	Torben Königk	SMHI	The Arctic in the EC-Earth ESM, control and first scenarios
11:05 – 12:25			Process studies
15+5 min	Rüdiger Gerdes	AWI	Response of the ECHAM5 AGCM to 2007 SST and SIC anomalies
15+5 min	Abhay Devasthale	SMHI	Influence of Arctic Oscillation on the cloud vertical structure over the Arctic
15+5 min	J.-P. Paquin	<i>Centre ESCER, Montréal</i>	Sensitivity of Canadian RCM simulated surface/sub-surface climate for the pan-Arctic region to soil model configuration and organic matter.
15+5 min	Günther Heinemann	University of Trier	Dynamical downscaling for the Laptev Sea region of the Siberian Arctic and impacts on sea ice production in flaw polynyas
12:25 – 13:30			Lunch in SMHIs restaurant
13:30 – 14:40			Process studies 2
15+5 min	Perrie, William	Bedford Institute of Oceanography	Trends and projections for Arctic storms and related ocean processes in the western Canadian Arctic.
15+5 min	Frank Kauker	AWI and OASys	NAOSIMDAS - a variational data assimilation system of the Arctic's sea ice and ocean
10 min	Frank Kauker	AWI and OASys	Observational network design
15+5 min	Philippe Lucas-Picher	SMHI	On 5 km Greenland atmosphere modelling
14:40 – 16:00 incl. a coffee break	Discussion session		Possible coordinated coupled Arctic model experiments, including definition of experiments and joint analysis
16:00			End