

## Minutes of 2<sup>nd</sup> Polar Cordex meeting (Lund, June 17, 2014)

### Attendees:

John Cassano, University of Colorado  
Annette Rinke, AWI Potsdam  
Ruth Mottram, DMI  
Paul Ramirez, Paul Loikith, Huikyo Lee, JPL  
Glen Peters, CICERO Norway  
Torben Koenigk, SMHI  
Muralidhar Adakudlu, Uni Climate, Norway  
Igor Shkoluik, MGO  
Willem Jan van de Berg, IMAU/University Utrecht  
Nicole van Lipzig, KU Leuven, Belgium  
Yurui Zhang, University of Helsinki

### Polar CORDEX group updates:

Cassano: Plan to complete WRF and RASM ERA-I and CFSR retrospective simulations by the end of the year.

Rinke: Has completed HIRHAM simulations with ERA-I and with MPI-ESM forcing (historical, RCP 4.5, RCP 8.5). Will run simulations with EC-Earth and a third model (to be determined). Their coupled model HIRHAM-NAOSIM is being moved to a new computer and will be run with ERA-I once this move is completed.

Koenigk: RCA simulations completed for ERA-I with and without spectral nudging. Completed RC4.5 and RCP8.5 simulations with CanESM, EC-Earth, MPI-ESM and NorESM. Have completed RCAO simulations with ERA-I and RCP8.5 with EC-Earth and MPI-ESM. SMHI plans to move to HARMONIE atmospheric model and will not continue development of RCAO, but HARMONIE-NEMO. Initial HARMONIE simulations will be on a domain that includes part of the Arctic but not the pan-Arctic CORDEX domain. They also plan to work on high resolution global model simulations rather than coupled regional model simulations in the future.

Mottram: HIRHAM simulation with ERA-I is currently running. Will run HIRHAM RCP 8.5 simulations using EC-EARTH forcing. Will run coupled HIRHAM/HYCOM RCP8.5 simulations with EC-Earth with and without Greenland ice sheet model. Undecided if coupled model will be run with ERA-I. Antarctic HIRHAM simulations with ERA-I and EC-Earth are planned.

Adakudlu: Plan to run WRF with ERA-I by end of this year. Plan to run the coupled model COAWST for historical, and RCP4.5 and 8.5 with NorESM.

Shkolnik: Completed ERA-I simulation with MGO model. Plan to run RCP 8.5 with MPI-ESM forcing by end of 2014. Has had trouble submitted data to CORDEX archive.

van de Berg: Completed RCP8.5 CanESM simulation with RACMO over Greenland and Antarctic Peninsula. They have an updated version of RACMO that will be run with ERA-I for Arctic and Antarctic domains.

van Lipzig: Still working on model testing with COSMO-CLM. Plan to run Antarctic simulations with 25 km horizontal grid spacing.

Ramirez: May be able to provide code to convert model output to ESGF format.

Peters: Described AACA effort and sought contributions from Polar CORDEX for AACA report by the end of 2014. Arctic Cordex projections are mainly useful for the pan-Arctic report, but may be also for the regional reports (here is the problem the timeline). We had a following up discussion on this and keep the contact.

Others:

DMI and SMHI should decide on common EC-EARTH data to be used for RCP 8.5 forcing. AWI (and may be others) will also use this data then.

All groups should put emphasis to submit their data to the ESGF archive.

Polar CORDEX groups should plan on submitting data on their native model grid with 3 h output.

Individual groups should send updates on their polar CORDEX activities to Jenny Baeseman ([jbaeseman@gmail.com](mailto:jbaeseman@gmail.com)) to ensure that all information on our website (<http://www.climate-cryosphere.org/activities/targeted/polar-cordex/arctic>) is up-to-date.