Program for the IGS Nordic Branch meeting, 28-30 October 2010, Auditorium B

Thursday, 28
12:30-13:30 Registration
13:30-13:40 Welcome and practical matters
13:40-15:40 Calving, dynamics and historical records  convenor: Jon Ove Hagen
13:40 D. Benn: Calving Laws for Ice Sheet Models: Where Next?
14:10 T. Zwinger: Implementing Calving into a Full Stress Model
14:25 M. Schäfer: Basal drag pattern inferred from surface velocities for Vestfonna ice-cap (Svalbard) with a Full-Stokes model
14:40 K. Grunewald: Balkan glacier features as witnesses of local-regional climate-ecological changes
14:55 S. Nussbaumer: Historical glacier fluctuations of Jostedalsbreen and Folgefonna, southern Norway, reassessed by new documentary evidence, and their connection to climate
15:10 K. Kjær: The quest for the lost picture and surface detection change of the Greenland Ice Sheet
15:25 J. Moore: The historical global sea level budget

15:40-16:10 Coffee break
16:10-17:55 Ice cores  convenor: Christine Hvidberg
16:10 D. Dahl Jensen: Greenland ice cores tell tales on the extent of the Greenland Ice Sheet during the warm climate Eemian period 120,000 years BP.
16:40 D. Divine: Thousand yearlong reconstruction of winter air temperature variations in Longyerbyen, Svalbard Archipelago and Vardo, northern Norway, based on Svalbard ice core oxygen isotope data.
16:55 M. Koutnik: Inferring histories of accumulation rate, ice thickness, and ice flow from ice-sheet internal layers
17:10 D. Samyn: Dating and multivariate analysis of Svalbard ice core data: a nitrogen perspective in 20th century
17:25 P. Vallelonga: High-Resolution Continuous Flow Analysis of chemical signals in Greenland ice and snow
17:40 M. M. Magnússon: Report from the IGS office

18:00-20:00 Ice breaker reception

Friday, 29
9:00-10:30 The Link between the cryosphere and other parts of the Earth System.
9:00 M. Pejrup: Short introduction to the new Earth System Science Centre at the Falucity of Science KU
9:10 B. Elberling: High N2O production from thawing permafrost
9:30 S. Christensen: What terrestrial ecosystems do to atmosphere gases at elevated temperature. Regulation of CO2, CH4, and N2O differ.
9:50 K. Richardson: Ocean carbon uptake under different climate regimes
10:10 H. Hannesdottir: Modelling the response of Vatnajökull’s southeast outlet glaciers to climate change

10:30-11:00 Coffee break
11:00-12:00 Modeling  convenor: Gudfinna Adalgeirsdottir
11:15 A. M. Solgaard: Using atmospheric circulation patterns to assess precipitation over Greenland in the EC-Earth model
11:30 T. Sato: Modeling the flow of the Antarctic Ice Sheet and ice shelves with the model SICOPOLIS and the SeaRISE set-up
11:45  J. Ahlkrona: Updating the ice sheet model SICOPOLIS with an improved treatment of ice flow
12:00-13:00  Lunch
13:00-15:00  Surface properties and more  Convenor: Carleen Tijm-Reijmer
13:00  S. Guðmundsson: Tephra, mass- and energy balance: the influence of the Eyjafjallajökull eruption 2010 on Icelandic ice caps
13:15  C. E. Bøggild: Quantifying the glacier ice albedo from black carbon and other aerosols
13:30  V. Bednenko: Influence of carbon pollutions on radiation characteristic snow cover in Barentsburg of archipelago Spitsbergen
13:45  S. Ingvander: Antarctic Snow Grain Size variability at regional, local and sample scale and its relation to satellite retrieved Snow Grain Size information.
14:00  O. Järvinen: FINNARP 2009 Antarctica expedition: Solar radiation transfer measurements in snowpack
14:15  B. Kutschan: Brine channel formation in sea ice - Turing structures or phase field pattern?
14:30  A. Ahlstrøm: PROMICE - Monitoring the mass loss of the Greenland Ice Sheet
14:45  E. V. Laursen: DMI meteorological data available for glaciology –and vice versa!
14:53  A. Kääb: Particle movement on sorted circles measured from repeat terrestrial photos
15:00-16:30  Posters and coffee
16:30-18:00  Subglacial hydrology  Convenor: Alun Hubbard
16:30  P. Nienow: Seasonal evolution of subglacial drainage and ice motion at the margin of the Greenland Ice Sheet
17:00  G. A. Jones: Passive Seismic monitoring of in-situ lake drainage on the Greenland Ice Sheet
17:15  I. Willis: Structure, morphology and water flux of a subglacial drainage system, Middalsbreen, Norway
17:30  M. Jackson: Simultaneous measurements of surface motion, basal pressure and seismicity at Engabreen glacier, northern Norway.
17:45  C. Rye: Quantifying the predictive uncertainty of numerical mass balance models
19:00 -  Dinner at restaurant Riz Raz, please register before Oct. 24, price 200 dkr
Saturday, 30
9:00-10:30  Mass balance  Convenor: Rickard Petterson
9:00  H. Machguth: Surface Mass Balance of the Greenland Ice Sheet in the Paakitsoq Area, Ilulissat, Greenland - Scenarios and Related Uncertainties
9:15  L. M. Andreassen: Langfjordjokelen, a rapid shrinking glacier in northern Norway
9:30  C. R. Denby: The geodetic glacier mass balance of Jan Mayen for the period 1949 to 2008
9:45  B. Carlsson: Precipitation patterns and variations over Nordaustlandet dynamically downscaled from re-analysis data
10:15  M. Engelhardt: Can meteorological data from SeNorge be used as input for mass balance modelling on Norwegian glaciers?
10:30  S. Mutz: Impact of large-scale circulation modes, regional temperature and precipitation on the mass balance of South Norwegian glaciers
10:45  M. Citterio: The GlacioBasis glacier monitoring programme at A.P. Olsen Ice Cap (Zackenberg, NE Greenland)
10:30-11:00  Coffee break
11:00-12:30  Coffee break  Convenor: Liss M. Andreassen
11:00  S. H. Winsvold: Assessing glacier area change in Finnmark, northern Norway, using maps and Landsat imagery
11:15  T. Jóhanneson: Mapping the Surface and Surface Changes of Icelandic Ice Caps with LIDAR
11:30  V. Pohjola: Mass change of Vestfonna, Svalbard Archipelago
11:45  J. O. Hagen: The new Nordic centre of excellence: Stability an Variations of Land Ice (SVALI)
**Posters:**

Posters will be up during the entire meeting. The dedicated poster session will be Friday from 15-16:30.

1. C. Vega: In situ melting experiments: evaluating nitrate relocation after percolation events by means of stable nitrate isotopes
2. Mai Winstrup: Dating of Ice Cores using Visual Stratigraphy
3. Christine S. Hvidberg, Lars B. Larsen, Susanne L. Buchardt, Dorthe Dahl-Jensen, Sebastian B. Simonsen, Louise S. Sørensen, René Forsberg: Flow and rate of ice thickness change at the NEEM drill site, North Greenland
4. Ann-Marie Berggren, Ala Aldahan, Göran Possnert, Anna Sturevik Storm: Surface and snow pit $^{10}$Be from the NEEM drill site, Greenland
5. Christo Buizert, Vasilii V. Petrenko, Jeffrey L. Kavanaugh, Kurt M. Cuffey, Nathaniel A. Lifton, Jeffrey P. Severinghaus and Thomas Blunier: Modeling *in situ* cosmogenic production of radiocarbon in Taylor Glacier, Antarctica
7. Heid Torborg: Evaluation of different automatic image matching methods for deriving glacier displacements
8. Jacek A. Jania, Dariusz Ignotuk, Sebastian Sikora: Seasonal fluctuations of velocities on Hans Glacier ice-cliff (Spitzbergen, Svalbard)
10. Helena Psaros: Longitudinal coupling in ice dynamics during the spring and summer regime on Storglaciären, Kebnekasie, Sweden.
11. Patrick J. Applegate, Nina Kirchner, Emma J. Stone, Ralf Greve: Simple Bayesian calibration of a quasi-equilibrated Greenland ice sheet model
13. Aslak Grindsted: A simple model for the response of mountain glaciers to climate scenarios
14. Hrafnhildur Hannesdóttir: Modelling the response of Vatnajökull’s southeast outlet glaciers to climate change
15. Thomas Gölles: Modeling Oxygen Isotope distribution in the Greenland ice sheet
16. Katrin Lindbäck: Characterising subglacial conditions and processes for land terminating section of the Greenland Ice Sheet using geophysical methods
17. Manfred Stober: Elevation change and flow velocities at Swiss-Camp 1991 – 2008 and recent flow velocities at the Eqip Sermia glacier (West Greenland)
18. Alison Banwell, Ian Willis, Neil Arnold, Andreas Ahlstrom and Marco Tedesco: Meltwater Generation and Routing at Paakitsoq, West Greenland: Insights from a Distributed, Physically Based Numerical Model
19. Emilie Beaudon: Spatial and temporal variability of precipitation volume and snow chemistry on Vestfonna ice cap (Svalbard, Nordaustlandet).
20. Kjetil Melvold, Thomas Skaugen: Spatial distribution of snow depth at Hardangervidda Mountain, Norway, measured by airborne laser scanning


23. Jeppe Malmros: Method for monitoring changing snow/ice cover across mid Greenland, a bottom-up approach

24. Philipp Rastner, Tobias Bolch, Horst Machguth, Frank Paul: A new glacier inventory for South-Eastern Greenland from LANDSAT and ASTER GDEM data: Applied methods and challenges

25. Bernd Kutschan, Silke Thoms, Klaus Morawetz, Sibylle Gemming: Brine channel formation in sea ice - Turing structures or phase field pattern?

26. Elin Högström: Changes in surface hydrology of a land terminating section of Western Greenland ice sheet using GIS

27. Jack Kohler: ICESat elevations in Antarctica along the 2007-09 Norway-USA Traverse: validation with ground-based GPS

28. Andreas Bech Mikkelsen: Modelling the hydrology in an area of the Greenland Ice Sheet, Kangerlussuaq, West Greenland with Mike SHE


Films:

Friday 29, 12-16:30 two films from the SWIPA project will be shown continuously.

The SWIPA project, Climate Change and the Cryosphere: Snow, Water, Ice and Permafrost in the Arctic - 18 min

The Greenland Ice Sheet in a Changing Climate – 18 min