



20th NRB
2015 FINLAND



20th International Northern Research Basins Symposium and Workshop

Kuusamo, Finland, August 16–21, 2015

Program



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MINISTRY OF AGRICULTURE AND FORESTRY



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FEDERATION OF FINNISH LEARNED SOCIETIES
Delegation of the Finnish Academies of Science and Letters



Finnish Association for Geophysicists

20th Northern Research Basins Symposium and Workshop

16th - 21st August - Kuusamo, Finland

11.8.2015

Sunday 16th August

13:00	Bus will collect participants from Oulu (Radisson Blu hotel near the market square)
14:00	Bus will collect participants from Oulu airport
14:30-15:00	Bus will collect participants from Oulu railway station
15:00-19:00	Bus ride Oulu-Kuusamo (Ruka)
19:00-20:00	Check-in rooms and registration / Rukan salonki
20:00-21:30	Ice breaker party with supper

Monday 17th August

7:00-8:30	Breakfast
9:00-9:40	Opening of the symposium (Kuusamo town/Tuomo Hänninen and NRB organizers)
9:40-10:20	<i>Lijuan Wen: Observation and simulation study of atmosphere stability over the high-latitude Ngoring lake in the Tibetan Plateau</i> <i>Session: Role of snow and ice in northern hydrology (chair: Richard Janowicz)</i>
10:20-10:40	Masoud Irannezhad: Links between Changes in Ratio of Snow to Total Precipitation in Finland and Atmospheric Teleconnection Patterns
10:40-11:00	James Feiccabrino: A cross sectional study of rain/snow threshold changes from the North Sea across the Kjølén Mountains to the Bay of Bothnia
11:00-11:20	Yu Yang: Investigation of the climate impact on the snow and ice thickness in Lake Vanajavesi, Finland
11:20-11:40	Masoud Irannezhad: Trends and Regime Shift in Snow Days in Finland, 1909-2008
11:40-12:00	Yang Fang: Winter limnology eutrophication process: investigation on two Nordic Lakes from Finland and northern China
12:00-13:00	Lunch <i>Session: Value of hydrological information (chair: Björn Klöve)</i>
13:00-13:20	Knut Sand: The value of hydrological information – examples from the hydropower industry
13:20-13:40	Wolf-Dietrich Marchand: The value of hydrological information - real world examples from a consultants experience
13:40-14:00	Justice Akanegbu: Application of hydrologic information transfer for hydrograph prediction in boreal catchment: Kitkajärvi catchment, Kuusamo, Finland.
14:00-14:20	Jarkko Koskela: Design floods for small forested and agricultural catchments in Finland
14:20-14:50	Coffee break
14:50-15:10	Harri Koivusalo: Hydrological model FLUSH for agricultural water management in high latitude areas
15:10-15:30	Risto Mäkinen: Experiences and recommendations on automated groundwater monitoring
16:00-21:00	Sauna tour and dinner

Tuesday 18th August

7:00-8:30	Breakfast
8:30-9:10	<i>David Gustafsson: Arctic-HYCOS - a hydrological cycle observing system for improved monitoring of freshwater fluxes to the Arctic Ocean</i> <i>Session: Climate change impacts on arctic hydrology (chair: Lars Bengtsson)</i>
9:10-9:30	Terry Prowse: The Arctic Freshwater Synthesis (AFS): Foci, Results and Future Research Priorities
9:30-9:50	Sveta Stuefer: Hydrologic Observations of Low-gradient Alaskan Arctic Watersheds
9:50-10:10	Richard Janowicz: Impacts Of Climate Warming On The Hydrologic Response Of River Ice, Permafrost And Glacier Regimes Of Northwestern Canada
10:10-10:30	Ming-ko Woo: Summer and winter flows of a large northern river: the Mackenzie of Canada
10:30-10:50	Break
10:50-11:10	Masoud Irannezhad: National Scale Assessment of Growing Season Climate in Finland in Relation to Atmospheric Circulation Patterns, 1961-2011
11:10-11:30	Sean Carey: Contextualizing Precipitation and Runoff Response over 20 Year: The Wolf Creek Experience
11:30-11:50	Liudmila Lebedeva: Long-term historical data on hydrological cycle in small watersheds in Siberia as a key to understand runoff formation in permafrost environment

11:50-12:10	Olga Semenova: The use of standard hydrological data and process modelling to study possible transformation of permafrost landscapes after fire
12:10-13:10	Lunch <i>Role of ice and snow in northern environment (chair: Sveta Stuefer)</i>
13:10-13:30	Matti Leppäranta: The ice season of Lake Kilpisjärvi in the Arctic tundra in Finland
13:30-13:50	David Barret: Lake-ice conditions as a control of under-ice productivity and oxygen levels in the Canadian Arctic: a review
13:50-14:10	Masoud Irannezhad: Atmospheric Circulation Patterns Influencing Duration of Oulu-Hailuoto Ice Road in Finland
14:10-14:30	Glen Liston: High Resolution Snowdrift Simulations: Application to Polar Bears and Arctic Hydrology
15:00-21:00	Excursion: White water rafting and dinner

Wednesday 19th August

7:00-8:30	Breakfast
9:00-17:00	Excursion: Oulanka national park and visit to Oulanka research station
18:30-19:30	Dinner
19:30-21:00	Esko Kuusisto: Winter 2013-14 ice phenomena in Finland/ History of NRB

Thursday 20th August

7:00-8:30	Breakfast <i>Session: Role of snow and ice in northern hydrology & New techniques (chair: Harri Koivusalo)</i>
9:00-9:20	Leena Leppänen: Arctic Snow Microstructure Experiment for comparison of snow emission models to produce more accurate remote sensing observations of SWE
9:20-9:40	Johanna Korhonen: Comparison of snow water equivalent derived from passive microwave radiometer with in-situ snow course observations in Finland
9:40-10:00	Leo-Juhani Meriö: Measurement of snowmelt in a subarctic site using low cost temperature loggers
10:00-10:20	Edward Plumb: The Development and Operational Use of an Iridium Satellite Telemetered Multi-use Gage (iGage) for Hydrologic, Snowfall, and Coastal Storm Surge Measurements in Alaska
10:20-10:40	Break
10:40-11:00	Edward Plumb: An Overview of the 2013 Yukon River Flooding and the Resulting Development of River Ice and Flood Extent Products Derived from the Suomi NPP VIIRS Satellite Data
11:00-11:40	<i>Osmo Rätti: Arctic Centre - National and International Arctic Hub & Epidemiology of Sindbis Virus</i>
11:40-12:40	Lunch <i>Session: Role of snow and ice in northern hydrology & Climate change (chair: Matti Leppäranta)</i>
12:40-13:00	Esko Kuusisto: Trends of breakup dates in Finnish lakes in 1963-2014
13:00-13:20	Iina Ronkainen: Long-term changes in sea ice in the Baltic Sea
13:20-13:40	Brandi Newton: Causes and implications of extreme freeze- and break-up of freshwater ice in Canada
13:40-14:00	Tiiia Pedusaar: Trends in ice phenology of Estonian Rivers
14:00-14:20	Johanna Korhonen: Usability of water temperature data from water level pressure transducers
14:30-18:00	Visit to Kuusamo (Hannu Hautala photo exhibition and Predator Center)
19:30-23:00	Banquet

Friday 21th August

7:30-8:30	Breakfast
9:00-9:40	<i>Thorsteinn Thorsteinsson: Glaciers and ice caps - A disappearing water resource?</i>
9:40-11:00	<i>NRB Workshop: Task force reports, future plans, next NRB and farewells</i>
11:00-12:00	Lunch
12:00	Check-out
12:00-16:00	Bus ride from Ruka (via Kuusamo airport) to Oulu
16:30	Arrival in Oulu airport and city center