

61st Annual Eastern Snow Conference

61^e Édition de la Eastern Snow Conference

Portland Maine, USA

June 9-11 juin, 2004

PROGRAM AND ABSTRACTS
PROGRAMME ET RÉSUMÉS

61st Annual Eastern Snow Conference

**June 9-11, 2004
Portland Maine, USA**

Eastern Snow Conference Executive, 2003-2004

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Derrill Cowing, USA

Tom Hawley, USA

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Hardy Granberg, Sherbrooke, Canada

WEBMESTRE

Andrew Klein (Texas A & M University, USA)

ORGANISATION LOCALE

Derrill Cowing, USA

Tom Hawley, USA

Program 61st Eastern Snow Conference

Wednesday, June 9th

- 19:00 Registration Begins, Ice Breaker Reception, Commercial Exhibits and Poster Paper Set-up
20:30 ESC Executive Pre-Conference Meeting

Thursday, June 10th

- 07:00 Attendees Breakfast
07:45 Registration and Poster Paper Set-up Continues
08:00 Welcome and Announcements: Susan Taylor & Derrill Cowing

Oral Session 1 MEASURING SNOW AND SNOW PROCESSES

Chair: S.R. Fassnacht

- 08:10 Estimating Alter-shielded Gauge Snowfall Undercatch and Snowpack Sublimation at Six Sites in the Coterminous United States
S.R. Fassnacht
- 08:30 All Weather Precipitation Gauge Algorithms
Harry H. Lamb and Yves Durocher
- 08:50 Temperature gradient metamorphism observed by computed micro-tomography
S. A. Sokratov, Th.U. Kaempfer, M. Schneebeli
- 09:10 **Poster Paper Highlights** (5 minute presentation by Author)
- 1 Using an Ultrasonic Snow Depth Sensor for the Remote Collection of Snowfall and Snowdepth Data for Operational and Climatological Purposes
Mark Turner
 - 2 Scaling-up of greenhouse gas emissions through snow cover from an agricultural field in Southern Quebec (Canada)
Julie Corriveau, Eric van Bochove, Monique Bernier and Niang Mohamed
 - 3 Influence of Method of Measurement of Daily Snowfall on Climate Normals in Ontario Canada
H.R. Whiteley
 - 4 Hydrochemical Responses of Snowmelt under Artificial Rain-on-Snow Experiments
Jeonghoon Lee, Anthony M. Faiia, Xiahong Feng, James W. Kirchner and Randall Osterhuber

09:30 – 10:00 Coffee and Poster Session

Oral Session 2 REMOTE SENSING OF SNOW AND ICE

Chair: Chris Derksen

- 10:30 Assessing snow water equivalent distribution across the Canadian northern boreal forest
C. Derksen, M. MacKay, R. Brown, and A. Walker
- 11:00 Mapping and identification of snowpack variation across winter habitat of Peary caribou with RADARSAT-1
Paul Budkewitsch, Andrew Maher, Paul Trietz and Michael Ferguson
- 11:30 **Poster Paper Highlights** (5 minute presentation by Author)
- 1 Validation of MODIS Snow Maps in Different Land Covers in Scandinavia
Dorothy K. Hall, Rune Solberg, Kimberly A. Casey and Jan-Gunnar Winther
- 2 Aqua MODIS Band Changed Snow Map Products
George Riggs and Dorothy K. Hall
- 3 An assessment of the usefulness of MODIS daily snow cover maps for studying snow cover variations in the tropics
Andrew G. Klein and Songweon Lee

11:45 - 13:00 Lunch

Oral Session 3 BASIN-SCALE SNOW ESTIMATES

Chair: Rae Melloh

- 13:00 Examining Snowfall Distribution across the Gray, ME County Warning Area
Chris Cassidy and James C. Hayes
- 13:20 Modes of uncertainty affecting assimilation of snow observations into land surface models
Cline, D., Li, L., Fall, G., and C. Olheiser
- 13:40 The snowmelt module inside GEOTOP
F. Zanotti, S. Endrizzi, G. Bertoldi and R. Rigon
- 14:00 Relationships Between Point Snow Depth Measurements and Snow Distribution at the Landscape Level in the Southern Boreal Forest of Saskatchewan
N. N. Neumann, C. Derksen, and B. Goodison
- 14:20 **Poster Paper Highlights** (5 minute presentation by Author)
- 1 Basin segmentation and distributed melt factor determination for snowmelt modeling in the Hubbard Brook Forest, New Hampshire
Rae Melloh and Janet Hardy

- 2 A Laurentian Great Lakes Ice Cover Climatology
Raymond Assel

14:30-15:00 Coffee Break & Poster Session

- 15:00 Streamflow Predictability in the Upper versus Lower Colorado River Sub-basins
S.R. Fassnacht
- 15:20 Creating a Denser Basin Averaged SWE Grid by Incorporating Daily Observations with Biweekly Basin Averaged SWE
Kevin Coulon

Oral Session 4 GLACIAL PROCESSES
Chair: Mauri Pelto

- 15:40 Climatic variation, glacierisation and runoff from high mountain basins
David N. Collins
- 16:00 Temperature-ablation relationships on glaciers and in alpine areas, north cascades, Washington
Mauri S. Pelto
- 16:20 Mobility of heavy cargo sleds on the Ross Ice Shelf, Antarctica
J.H. Lever and R. Alger
- 16:40 **Poster Paper Highlights** (5 minute presentation by Author)
- 1 Retreat of Irian Jaya Glaciers from 2000 to 2002 as measured from IKONOS satellite images
Joni Kincaid and Andrew G. Klein
- 2 Variations in the net water balance during an ablation season at Findelengletscher, Switzerland
Nick Rutter

16:50 Announcements

- 18:00 Cash bar at DeMillos floating restaurant
19:00 **ESC BANQUET** at DeMillos floating restaurant

Friday, June 11

07:00 Attendees Breakfast

08:00 Announcements

Oral Session 5 LAKE ICE

Chair: James Lever

08:10 Simulated patterns of lake ice growth and decay across Canada (1980-1996)
Claude R. Duguay, Frédérique C. Pivot, Ross D. Brown, Greg M. Flato,
Patrick Ménard, and Wayne R. Rouse

08:30 Recent trends in Canadian lake ice covers
Claude R. Duguay, Terry D. Prowse, Barrie Bonsal, and Martin Lacroix

08:50 **Poster Paper Highlights** (5 minute presentation by Author)

1 A Laurentian Great Lakes Ice Cover Climatology
Raymond Assel

09:00-09:30 Coffee Break & Poster Session

Oral Session 6 WINTER STORMS

Chair:

09:30 Experimental Study and Modelling of Flashover Performance of EHV Insulators
Covered with Ice
J. Farzaneh, J. Zhang and M. Farzaneh

09:50 The Maritime Blizzard of 2004
Carolyn Marshall, George Parkes, Chris Fogarty and Darin Borgel

10:10 Northwest Flow Snowfall in the Southern Appalachians: Synoptic Processes and
Spatial Patterns
Baker Perry and Charles E. Konrad, II

10:30 Easterly Flow Snowfall in the Southern Appalachians: Synoptic Processes and
Spatial Patterns
Charles E. Konrad II and Baker Perry

10:50 Climatic Signal Recorded in Regional-Scale High-Magnitude Snow Avalanche
Chronology in the Chic-Choc Mountains, Québec, Canada
Daniel Germain, Dr. Bernard Héту and Dr. Louise Filion

11:10 Forecasting Ice Affected Rivers at the Northeast River Forecast Center
Thomas W. Econopouly, E.J. Capone, and V.T. Hom

11:30 **Closing Remarks. End of Oral Sessions**

12:00 **Lunch.** ESC Executive post-Conference meeting.