

2010 EASTERN SNOW CONFERENCE MEETING PROGRAM

ORAL PRESENTATIONS WILL BE IN CRANE EAST

Tuesday 8 June 2010

- 6:00 pm Registration
7:00 pm Ice breaker buffet reception in Crane West
8:30 pm ESC Executive Meeting

Day 1: Wednesday 9 June 2010

- 7:00 am **Breakfast in Crane West**
8:00 am Welcome: Conference Program Chair

New York (Chair: Mauri Pelto)

- 8:10 am AR4 Climate Model performance in simulating snowpack over Catskill Mountain watersheds.
A. Anandhi, S. Pradhanang, D. Pierson, A. Frei, E. Schneiderman, M. Zion, R. Mukundan, A. Matonse, J. Porter, D. Lounsbury, and D. Kent
- 8:30 am Changes in Snowmelt and the Timing of Runoff: Consequences for NYC Reservoir Nutrient Loading and Trophic Status
D. Pierson, H. Markensten, E. Owens, E. Schneiderman, M. Zion, A. Anandhi, S. Pradhanang, A. Matonse and D. Kent
- 8:50 am Investigation of the impacts of climate change on the timing and magnitude of winter streamflow for the Catskill Mountain Region
M. Zion, S. Pradhanang, D. Pierson, D. Fuka, Z. Easton, T. Walter, T. Steenhuis, E. Schneiderman, D. Lounsbury, A. Anandhi, A. Frei, A. Matonse, R. Mukundan Donald P. Kent, and J. Porter
- 9:10 am Quantitative Comparison of Two National Weather Service Snow Models in the New York City Reservoir Watersheds
C. Reilly, M. Schaeffner and J. Porter
- 9:30 am Assessing the implications of ski area development for snow distribution and runoff production during snowmelt in northern New England, USA
B. Wemple, J. Shanley
- 9:50 am Poster Presentations I: 1 minute per poster
- 10:10 am **Coffee Break in Crane West**

(Chair: R.Hellstrom)

- 10:40 am Cost-Effective Snowpack Measurements at the Harvard Forest LTER Site
R. Hellstrom
- 11:00 am Spatiotemporal Distribution of All-wave Radiation in Discontinuous Canopies with Application to Snowmelt Prediction
T. Link and R. Lawler
- 11:20 am Canopy Interception-Evaporation Variation with Climate
R. Melloh, J. Campbell and S. Frankenstein
- 11:40 pm Spatial and temporal trends of snowmelt at an extensive High Arctic wetland
J. Assini and K. Young
- 12:00 pm **Lunch in the Crane West**

(Chair: R.Melloh)

- 1:10 pm Weisnet talk
- 1:30 pm Spatial and temporal characteristics of the river ice break-up season in Canada
S.von de Wal, L. de Rham and T. Prowse
- 1:50 pm Ku and x-band scatterometer observations of terrestrial and lake ice snow
J. King, R. Kelly, C. Duguay, C. Derksen, P. Toose, A. Silis, A. Royer and A. Langlois
- 2:10 pm Estimating ice thickness on large northern lakes from passive microwave satellite data
K. Kang, C. Duguay, and A. Kouraev
- 2:30 pm **Poster Presentations 2:**
- 2:45 pm **Coffee Break**

(Chair:A.Langlois)

- 3:10 pm Improvement of simulated passive microwave brightness temperatures using airborne radiometer measurements for Snow Water Equivalent (SWE) retrieval
A. Langlois, A. Royer and K. Goita
- 3:30 pm Pan-arctic seasonal trend detection in daily GlobSnow snow water equivalent against NTSG AMSR-E derived vegetation microwave transmittance and surface soil moisture
K. Luus, C. Duguay, R. Kelly, J. Lin and Y. Gel

- 3:50 pm 2009 Snow Flight Results from NASA's Airborne Earth Science Microwave Imaging Radiometer (AESMIR)
E. Kim
- 4:30 pm Jiminy Peak-Zephyr Windpower tour
- 7:00 pm **ESC Banquet: Crane West**
Speaker: Doug Hardy

Day 2: Thursday 10 June 2010

7:00 am **Breakfast in Crane West**

(Chair: D. Hall)

- 8:30 am Satellite-Derived Snow Maps from the 2009 – 2010 Snow Season in North Carolina
D. Hall, J. Foster, C. Fuhrmann, B. Perry, G. Riggs, D. Robinson
- 8:50 am Spatial Patterns of Snowfall in North Carolina: Surface and Satellite Perspectives
C. Fuhrman, D. Hall and B. Perry
- 9:10 am Overview of the 2009-2010 Snow Season in the Southern Appalachian Mountains
B. Perry, D. Hotz, S. Keigton, L. Lee, J. Dobson, D. Hall and C. Konrad
- 9:30 am A 16-year Climatology of Ice Storms in WFO Albany's County Warning Area and a Comparison of Two Recent Events
J. Quinlan and K. Lipton
- 9:50 am **Coffee Break**

(Chair A. Frei)

- 10:20 am Comparison of optical based snow extent observations during Winter and Spring over North America
A. Frei and S. Lee
- 10:40 am Snow-atmosphere coupling strength and its contribution to climate predictability
L. Xu
- 11:00 am Not so fast: Given up for dead, Northern Hemisphere snow cover extent makes a comeback in the fall and winter of 2009/10
J. Cohen and J. Foster
- 11:20 am Melt energetics of twenty-five years of distributed, physically-based snowcover simulations in a small headwater catchment in the semi-arid western United States
M. Reba, D. Marks and A. Winstral
- 11:50 am **Lunch in Crane West**

(Chair: B. Wemple)

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- 1:00 pm Projections of Air Temperatures and Melt Season Duration for McMurdo
J. Weatherly and J. Helble
- 1: 20 pm Characterizing the Microstructural Evolution
of both Natural Snow Crystals and Spherical Ice Particles
S. Chen and I. Baker
- 1:40 pm The 2009 and 2010 Ground Passive and Active Snow (GAPS) Experiments
**M. Tedesco, H. Marshall, N. Steiner, E. Josberger, X. Xu, S. Evans, T. Painter and
M. Skiles**
- 2:00 pm Inconsistency in the Large-scale Physiographic Drivers for Snow Accumulation
across the Colorado River Basin
S.R. Fassnacht R. Bales, K. Dressler 3, D. Hultstrand
- 2:00 pm **End**
- 3:30 pm ESC Executive Meeting

POSTER PRESENTATIONS CRANE WEST

POSTER PRESENTATIONS I

Evolution of firn layers over time

Z. Courville, M. Albert and E. Willimason

Impact of glacier retreat on Skykomish River Hydrology

M. Pelto

Snow and firn density variability in West Central Greenland

V. Zagrodnov, E. Mosley-Thompson and V. Mikhalenko

Microstructural Characterization of Winter and Summer Layers of Summit, Greenland Firn

K. Keegan, R. Lomonaco, M. Albert, and I. Baker

Investigating Impact of Basal Topography on Greenland Ice Sheet Surface Morphology and
Supraglacial Lake Distribution

J. Vanderberg

Supraglacial stream hydrologic controls

B. Pelto

Polar Lessons for the IPY from the IGY: Some Canadian examples

M. Ecclestone, P. Adams and G. Cogley

Analyzing RADARSAT-1 imagery to determine variability and trends in ice cover on shallow lakes
near Churchill, Manitoba

N. Svacina and C. Duguay

Enhanced MODIS Snow Cover Mapping from Decision Tree Technique

G. Riggs

Satellite identification of snowline variation during the melt season in mass balance assessment
Take and Brady Glacier, Alaska

M. Pelto

POSTER PRESENTATIONS II

The Winter Season of 2009-2010 in the Southeast United States:

C. Fuhrmann, C. Konrad II, and W. Schmitz

Changes in Snowmelt and the Timing of Runoff:

A. Matonse, M. Zion, A. Anandhi, D. Pierson, A. Frei, E. Schneiderman, D. Lounsbury, S. Pradhanang, R. Mukundan, and D. Kent

Spatial variability of snowpack in Catskill Mountain watersheds: an assessment using the USDA-SWAT Watershed Model and snow survey data

S. Pradhanang, A. Anandhi, D. Pierson, E. Schneiderman, M. Zion, J. Porter, R. Mukundan, A. Matonse, D. Lounsbury, and D. Kent

Application of Snow Core and Automated Remote Data Collection to Monitor SWE in NYC's Drinking Watershed

G. Horton and J. Porter

The Edmonton Journal and La Presse Newspaper (1959-2006): a comparison in delivering the message of winter in Canada

J. Toupin

Impacts of Complex Terrain on Hydrometeorological Processes within a Tropical Alpine Valley in the Peruvian Andes

R. Hellstrom, B. Mark, A. Higgins, and D. Ferris

Observations of the Vertical Structure of NWFS during a Warm-Phase ENSO Winter

L'Heureux, B. Perry and D. Miller

Snowfall in Semi-arid Regions: the Influence of Climate Change and Variability

S. Fassnacht, K. Jamiyansharav, and S. Stevenson

Examining algorithm performance for passive microwave observations in the mountains of the central Yukon

A. Kasurek

A physically-based approach to improving estimates of snow states and fluxes in a conifer forest of Sequoia National Park

K. Musselman, N. Molotch and S. Margulis

Evaluation of soil freezing on the quantity and source of carbon and nitrogen in leachate during snowmelt

J. Campbell, P. Templer and A. Reinmann

An Economical Approach to Automated Snow Depth Observations

S. Helfrich, B. Jackson, W. Ryan, P. Clemente-Colón

Snow Depth and Lake Ice Phenology from Full-Waveform ICESat/GLAS Data

J. Oldham and R. Kelly