

LITTLE ALASKA WEATHER SYMPOSIUM (LAWS)

A G E N D A

University of Alaska Fairbanks, Geophysical Institute,
Elvey Auditorium/Globe Room
May 12 – 13, 2008

MONDAY, MAY 12

8:00 – 8:30 Breakfast

8:30 – 9:00 Address by the Sponsors

9:00 – 9:30 Keynote

Katja Friedrich, University of Colorado at Boulder
Innovations in Monitoring and Nowcasting Orographic Precipitation by Weather Radar

9:30 - 10:50 Assimilation Session

Peter Childs, Neil Jacobs, Meredith S. Croke, AirDat LLC
Optimizing the Impact of TAMDAR Data on WRF-ARW Simulations over Alaska

Meredith S. Croke, Neil Jacobs, Peter Childs, and Yubao Liu, AirDat LLC and NCAR
PenAir-Based TAMDAR-Related Impacts on Short-Range Mesoscale Forecasts over Alaska

Yubao Liu, Wanli Wu, Al Astling, Craig Edgeland, Rong-Shyang Sheu, Francois, Vandenberghe, Tom Warner, and Scott Swerdlin, Research Application Laboratory, NCAR, US Army Dugway Proving Ground, and US Army Cold Region Test Center
An MM5 and WRF-based Rapid-Cycling Multi-Scale Weather Analysis and Forecasting System for Supporting the Test and Evaluation at the Army Cold Region Test Center

Frank McDonough, Marcia K. Politovich, and Cory A. Wolff, NCAR
The Past, Present, and Future of the AWRP's In-Flight Icing Work in Alaska

10:50 Break and Poster Session

Stacy E. Porter and Nicole Mölders, University of Alaska Fairbanks, Geophysical Institute, and College of Natural Science and Mathematics
Investigation and Formation of a Ship Emission Inventory for the Gulf of Alaska

Jing Zhang, Atmospheric Science Group
Beaufort Sea Coastal Wind Regime Study

David H. Bromwich, Keith M. Hines, Dale M. Barker, John E. Walsh, Mark C. Serreze, Ying-Hwa Kuo, Fei Chen, Le-Sheng Bai, Sheng-Hung Wang, Andrew G. Slater, William L. Chapman, Hans Huang, Michael Bariage, Tae-Kwon Wee, Paul R. Berge, and Lin Li
A Multi-Year Arctic System Reanalysis

Gerhard Kramm

Statistical Analysis of Alaska's Long-Term Observation Records

11:20

Process Studies Keynote 1

John Cassano, University of Colorado at Boulder

Development and Validation of Polar WRF

11:50

Process Studies Session 1

Karl Volz, Peter Q. Olsson, and Haibo Liu, Alaska Experimental Forecast Facility, University of Alaska Anchorage; Alaska State Climate Center, ENRI, University of Alaska Anchorage

The Prince William Sound Low and Associated Impact on Anchorage Significant Snowfall Events

Peter Q. Olsson, Haibo Liu, and Karl Volz, Alaska Experimental Forecast Facility, University of Alaska Anchorage; Alaska State Climate Center, ENRI, University of Alaska Anchorage

On Simulating Near-Surface Wind Regimes in Prince William Sound Using the WRF Numerical Model and its Attendant Preprocessors

Paul Suffern, Forecaster, WFO Juneau

Comparison of SAR Imagery and Southeast Alaska WRF Wind Modeling

12:50

Lunch & Weather Briefing

2:00

Process Studies Session 2

Sergei Maurits, Brenton Watkins, Anton Kulchitsky, and Arun Venkatasubramanian, Arctic Region Supercomputing Center, University of Alaska Fairbanks

Application of the Alaska WRF Data for Simulation of Refraction of the High-Frequency Radio Signals by the Meteorological Elements

Don Morton, Eric Stevens, and Gene Petrescu, Arctic Region Supercomputing Center, National Weather Service, WFO Fairbanks, and National Weather Service, WFO Missoula

Will WRF at High Resolution Capture Fairbanks' January 2008 Major Snowfall Event?

- 2:40 Break
- 3:20 Climatology Studies Session 1
- Jessica E. Cherry**, IARC/ARSC
Treatment of Snow in the WRF Model
- Eric Stevens** and **Rick Thoman**, National Weather Service
Impact of Snow Pack on Temperatures in Fairbanks in October
- Corey A. Bogel**, NOAA/National Weather Service/Weather Forecast Office, Fairbanks, Alaska
A Climatology of Snowfall and Upper Air Patterns Associated with Heavy Snowfall Events at Fairbanks
- Stefanie Bourne**, **Uma S. Bhatt**, **Jing Zhang**, and **Richard Thoman**, Geophysical Institute, University of Alaska Fairbanks, and National Weather Service
Observed and Modeled Temperature Inversions in Alaska
- Richard Thoman**, National Weather Service
Changes in Winter Temperature Distribution in Interior Alaska
- 4:40 Day ends
- 6:00 Dinner @ TBD
(Dutch Treat)

TUESDAY, MAY 13

- 8:00 – 9:15 Breakfast
- 9:15 Nicole Mölders
Information on special issue of Atmospheric Research
- 9:20 Climatology Keynote 2
Daniel Petersen, NOAA/NWS Hydrometeorological Prediction Center
The New Alaska Forecast Desk at the Hydrometeorological Prediction Center

9:50

Climatology Studies Session 2

Michael Richmond, Natural Resource Management, Forest Services
Department

*Upper Air Trend Analysis for Interior Alaska, 1948-2006 and Relationship
of Parameters with Seasonal Wildfire Acreages*

Ted Fathauer and Nicole Mölders

Department of Atmospheric Sciences

*Analysis of the Relation of Annual Pollen Release to the Weather in
Fairbanks, Alaska*

Debasish PaiMazumder and Nicole Mölders

University of Alaska Fairbanks, Geophysical Institute and College of
Natural Science and Mathematics

*Investigations on the Dependency of Regional Average Accuracy on
Network Density at Site Distributions*

10:50

Break

11:20

Process Studies Session 3

**Uma S. Bhatt, Donald A. Walker, Martha K. Reynolds, and Josefino
C. Comiso**, Geophysical Institute, University of Alaska Fairbanks;

Institute of Arctic Biology, University of Alaska Fairbanks, Cryospheric
Sciences Branch, NASA Good Space Flight Center

*Role of Atmospheric Processes in Sea-Ice land-Surface Interactions over
Alaskan Tundra Vegetation*

Morgan E. Brown and Nicole Mölders, University of Alaska Fairbanks,
Department of Atmospheric Sciences

Impact of the 2006 Augustine Volcano Eruption on Daily Weather

Gerhard Kramm and Martin Stuefer, Geophysical Institute, University
of Alaska Fairbanks; Geophysical Institute, Arctic Regional
Supercomputing Center, University of Alaska Fairbanks

*Atmospheric Boundary Layer Parameters and Derived Fluxes for the
ARM North Slope of Alaska Site of Barrow*

12:20

Lunch & Weather Briefing

Poster Session

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Gerhard Kramm
Statistical Analysis of Alaska's Long-Term Observation Records

2:00 Process Studies Keynote 2

Georg Grell, CIRES/NOAA/ESRL
WRFV3/Chem: Recent Developments and Applications

2:30 Process Studies Session 4

Nicole Mölders, Geophysical Institute and College of Natural Science and Mathematics, Department of Atmospheric Sciences
Comparison of CFFDRS and NFDRS Fire Indices Devised from WRF Forecast

Martin Stuefer, Anton Kulchitsky, Lee Higbie, and Greg Newby, Geophysical Institute and Arctic Region Supercomputing Center, University of Alaska Fairbanks
Smoke Modeling in Alaska

3:30 Group Discussion

4:30 Workshop Ends