

AGENDA: DRI Evaporation Workshop

08:00 – 08:30: Registration

08:30 – 08:35: Welcome and introduction to the purpose of the workshop (John Pomeroy)

PART I: OVERVIEW OF EVAPORATION (Chair: John Pomeroy)

08:35 – 08:50 The Role of Evaporation in DRI (John Pomeroy)

08:50 – 09:20 Overview of the Principles of Evaporation Estimation (Raoul Granger)

09:20 – 09:50 Approaches to Modelling Evaporation in Climate Models (Diana Verseghe)

09:50 – 10:00 The Water Cycle, DRI and Evaporation (Ron Stewart)

10:00 – 10:15 BREAK

PART II: MEASURING AND UNDERSTANDING EVAPORATION (Chair: Diana Verseghe)

10:15 – 10:30 Trends in Evaporation Estimates for the Canadian Prairies (Nicole Hesch, Donald H. Burn and Gordon Bell)

10:30 – 10:45 Agricultural Drought Indices (Paul Bullock)

10:45 – 11:00 Evapotranspiration from the Southern Boreal Forest 1999 to 2006 (Alan Barr)

11:00 – 11:15 Measuring Actual Evapotranspiration from Large Areas Using Geological Weighing Lysimeters (Garth van der Kamp)

11:15 – 11:30 Problems in Estimating Evaporation in a Complex Prairie Environment (Robert Armstrong and John Pomeroy)

11:30 – 11:45 Local Evapotranspiration in Prairie Thunderstorm Formation (and Lack in Thunderstorm Drought) (Geoff Strong)

11:45 – 12:00 Observations of Turbulent Energy Fluxes over Open Snow Fields (Warren Helgason and John Pomeroy)

12:00 – 12:15 Evaporation: A Global Challenge for Monitoring and Modelling (Rick Lawford)

12:15 – 12:30 The DRI Data Access Interface (DAI) (Charles Lin)

12:30 – 13:00 LUNCH (IN ROOM)

PART III: MODELLING EVAPORATION (Chair: Ron Stewart)

13:00 – 13:15 Evaluation of ET Modules in the Versatile Soil Moisture Budget in the West Nose Creek Watershed (Masaki Hayashi)

13:15 – 13:30 Fifty-Five Year (1951-2005) Simulation of Daily Soil Moisture Using the Variable Infiltration Capacity Model over the Liard Basin in Canada (Lei Wen, Charles Lin)

13:30 – 13:45 A Soil Water Budget Approach to Improving Evapotranspiration Estimates from the 2nd Generation Prairie Agrometeorological Model (Mark Gervais, Paul Bullock, Rick Raddatz)

13:45 – 14:00 Evapotranspiration Modelling and Drought Impact Assessment in the Satellite Data Assimilation System (SDAS) of CCRS (Shusen Wang, Alexander Trishchenko, Richard Fernandes)

14:00 – 14:15 Evapotranspiration from the Prairie Agro-Meteorological Model (PAM2nd) (John Hanesiak)

14:15 – 14:30 Recent Advances in Modelling the Sublimation of Blowing Snow on the Canadian Prairies (John Pomeroy and Xing Fang)

14:30 – 14:45 General Modelling Discussion

PART IV: DISCUSSION (Facilitator: Rick Lawford)

Question: What are the requirements for data and what is the availability of data for calculating evaporation?

Question: Are current evaporation estimation techniques suitable for calculating evaporation feedbacks to the atmosphere, the soil and the surface water system?

Question: How could we better estimate evaporation estimates under drought conditions and use these estimates in assessing drought severity?

Question: How might the Canadian hydrometeorological community reduce uncertainty and improve accuracy in evaporation estimates for atmospheric and hydrological models? What can DRI contribute to this effort?

15:45 – 15:55 WORKSHOP SUMMARY AND DISCUSSION OF POSSIBLE PUBLICATION (Ron Stewart, John Pomeroy)

16:00 – 18:00 RECEPTION AT THE UNIVERSITY OF SASKATCHEWAN FACULTY CLUB