Geophysical Research Abstracts, Vol. 9, 10830, 2007
SRef-ID: 1607-7962/gra/EGU2007-A-10830

Recent Advances in understanding Drought on the Canadian Prairies: Successes of the Drought Research Initiative

R.G. Lawford (1)

R. Stewart (2)

J. Pomeroy (3)

1. University of Manitoba
2. McGill University
3. University of Saskatchewan

In January 2006, scientists from six Canadian universities and the federal and provincial governments launched a joint study known as the Drought Research Initiative (DRI). The primary objective of this study is to better understand the physical characteristics of and processes influencing Canadian prairie droughts, and to contribute to their better prediction, through a focus on the recent severe multi-year drought that began in 1999 and ended in the spring of 2005. In addressing this drought the program is focusing on three themes, namely: quantifying the physical features of this recent drought, improving the understanding of the processes and feedbacks that governed the formation, evolution, cessation and structure of the drought, and assessing and reducing uncertainties in the prediction of the drought and its structure. This presentation describes the scope of the drought problem and reviews the scientific progress that has been made in the first year of this initiative. The presentation places a particular emphasis on the results of drought process studies from atmospheric circulation features at hemispheric scales to groundwater processes at watershed scales. It will also describe some of the research challenges that face the project and describe DRI's plans for addressing them.