

Understanding, representing and communicating earth system processes in weather and climate within CNRCWP

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The Canadian Network for Regional Climate and Weather Processes (CNRCWP) provides significant advances and innovative research towards the ultimate goal of reducing uncertainty in numerical weather prediction and climate projections for Canada's Northern and Arctic regions. This talk will provide an overview of the Network and selected results related to the assessment of the added value of high-resolution modelling that has helped fill critical knowledge gaps in understanding the dynamics of extreme temperature and precipitation events and the complex land-atmosphere interactions and feedbacks in Canada's northern and Arctic regions. In addition, targeted developments in the Canadian regional climate model, that facilitate direct application of model outputs in impact and adaptation studies, particularly those related to the water, energy and infrastructure sectors will also be discussed. The close collaboration between the Network and its partners and end users contributed significantly to this effort.