

CGU_H_02: Permafrost Hydrology

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Session Description

The presence of permafrost has a significant effect on hydrological, hydrogeological and eco-hydrological processes. Understanding the interdependence of permafrost, surface and subsurface hydrology and ecosystems is critical to understanding not just the flux and storage of water, but also how such systems might change in response to climate and anthropogenic disturbance. However, no comprehensive view exists of the relationships between permafrost and hydrology across Canada's permafrost landscapes. Consequently, it is difficult to extrapolate documented responses of these systems to climate change and other stressors. One of the goals of the CGU Hydrology Section's new Committee on Permafrost – Hydrogeology Interactions is to stimulate research concerning permafrost hydrology in Canada. To help achieve this goal, we invite abstracts discussing all aspects of hydrology, ecology, hydrogeology and geomorphology in permafrost environments. This includes recent advances in understanding the mechanics and impacts of permafrost degradation, methods for modelling these processes, and approaches to gain better process understanding through field investigations, laboratory experiments and remote sensing techniques.

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Joint Session Submission: none