



## Community

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### 1A - Permafrost in Community: Collaboration and Geohazard Mitigation Strategies.

Alexandre Chiasson<sup>1, 2</sup>, Emma Street<sup>3</sup>, William Quinton<sup>4</sup>

*<sup>1</sup>Department of Earth and Atmospheric Sciences, University of Alberta, Edmonton, Canada., <sup>2</sup>Permafrost Archives Science Laboratory, University of Alberta, Edmonton, Canada, <sup>3</sup>Arctic Landscape Ecology Lab, University of Victoria, School of Environmental Studies, Victoria, British Columbia, Canada, <sup>4</sup>Cold Regions Research Centre, Laurier University, Faculty of Geography and Environmental Studies, Waterloo, Ontario, Canada*

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As climate change warms the Arctic four times faster than the rest of the planet, permafrost and the northern communities that rely upon it are facing times of immense transition. Permafrost thaw is rapidly changing landscape morphology, hydrological and biogeochemical regimes, and ecosystem services. These changes place existing infrastructure at risk, including transportation and energy networks, and threaten sociocultural well-being in northern communities. Understanding the complex nature of permafrost thaw and its consequences presents a major challenge requiring knowledge from multiple disciplines, sources, and traditions.

This session aims to address this collaboration by highlighting the importance of Indigenous community engagement in permafrost mapping, land-use planning, and geohazard characterization. We welcome contributions on community-based participatory methods, including participatory photography, ethnographic mapping, and interviews, and direct participation in research programs that provide opportunities for community members to share their perspectives and knowledge about their environment, alongside western scientific investigations.

This session seeks to develop a comprehensive and nuanced understanding of the current state of permafrost at the community level. Community members, polar organizations, and researchers are invited to share their experiences of permafrost change, and speak to knowledge sharing in permafrost research, community engagement, and permafrost and geohazard characterization in northern communities.

**Keywords:** Northern Communities, Cartography, Community-Based Participatory Research, Land-Use Planning

Contact: Alexandre Chiasson: [chiasso1@ualberta.ca](mailto:chiasso1@ualberta.ca)