

**Category**

CR Cryosphere

**Session Number**

CR-1

**Session Title**

Permafrost: connecting measurements, monitoring, and modeling

**Session Description**

The quantification of permafrost and its changes over time is important and strongly reliant on model simulations. At the same time our understanding of permafrost systems is hampered by sparse data, environmental heterogeneity, and scale effects that make simulation and up-scaling difficult. We invite reports on individual studies and larger initiatives investigating permafrost and to enhance collaboration between the monitoring and modeling communities. Topics of special interest thereby include the systematic collection of observations into coherent datasets, the evaluation of model simulation results with observations, analyses of uncertainty across measurements, monitoring and modeling, and the visualization and communication of results and their uncertainties to diverse audiences.

**Keywords:** Permafrost, active layer, ground temperature, frozen ground, monitoring, modeling, ground ice, Arctic, Antarctic, Mountain

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