

## **Permafrost Carbon Feedback**

## 5B - Monitoring, Modelling, and Remote Sensing of the Permafrost Carbon Feedback

Elchin Jafarov<sup>1</sup>, Ted Shuur<sup>2</sup>, Jing Tao<sup>3</sup>

<sup>1</sup>Woodwell Climate Research Center, USA, <sup>2</sup>Northern Arizona University, USA, <sup>3</sup>Lawrence Berkeley National Laboratory, USA

The permafrost region stores 1440-1600 Pg organic carbon in soils, which represents nearly half of the world's soil organic carbon pool. Accelerated warming of the Arctic can impact the global climate system by thawing permafrost and exposing a substantial part of this carbon storage to decomposition and release as greenhouse gasses to the atmosphere. Our session is focused on advances in observations, modelling, and mapping techniques of the permafrost carbon feedback to climate change.

We invite modellers, observers, and remote sensing experts to share their research on permafrost carbon monitoring, modelling, and feedbacks in natural and urbanized settings. We solicit contributions related to in-situ, laboratory, model, and remote sensing observations to improve the understanding of uncertainties of the permafrost carbon feedback.

Keywords: Climate, Carbon, Biogeochemistry

Contact: Elchin Jafarov: ejafarov@woodwellclimate.org