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Theme -Theme 2: Observing in Support of Adaptation and Mitigation

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Poster title (brief) Population residing on permafrost in the Arctic

Abstract - text box

Permafrost occupies approx. 15% of the Earth land surface and 24% of the land part of the northern hemisphere. Warming of the near-surface permafrost in the Arctic has triggered permafrost disturbances in the landscape. This study estimates the impacts of permafrost thaw on the population residing in Arctic settlements by combing recent population data with current baseline and future projected permafrost extent. Key findings show that 51.3% of Arctic settlements are located on permafrost containing 31.8% of the total Arctic population. Among all the permafrost settlements 43.6% are coastal where 49.3% of the population reside. By 2050, 46.7% of these settlements won't be underlain by permafrost and 61.9% of the inhabitants currently living on permafrost will have to adapt to this change. This will have a strong impact on the livelihood of inhabitants living on permafrost as well as on the infrastructure especially in larger settlements.