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Theme -Theme 5: Arctic Observations in the context of Global Observing initiatives

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Poster title (brief) Global Terrestrial Network for Permafrost (GTN-P): Towards Sustaining Permafrost Observations

Abstract - text box

The Global Terrestrial Network for Permafrost (GTN-P) is the primary international programme concerned with sustained long-term monitoring of permafrost. Long-term monitoring of permafrost generates essential baseline information for the assessment of climate change impacts in polar and high mountain regions. GTN-P data are used in process understanding, to develop and validate numerical models, and to develop scenarios of permafrost evolution over time. GTN-P data have high socio-economical relevance to the populations living in permafrost areas and beyond, through the provision of key information for land management and planning decisions including those related to resource development and development of strategies to adapt to climate change in permafrost areas. GTN-P data are routinely used by national, circumpolar and international assessments of climate change. The GTN-P Data Management System supports automatic data submission, standardization, quality control, processing, and data access. There is a clear need for improved geographic coverage of the observational network in order to assess changes in permafrost system at regional and global scales. However, GTN-P data acquisition operates on a largely voluntary basis with partial funding through private, national and internationally-sponsored programmes. Sustaining and improving observational coverage requires dedicated long-term funding both on national and international level. The growing need for the permanent secretariat and data management personnel is essential in order to maintain the operational capacity of the network.