

National Correspondents Workshop on GTN-P Implementation and Data Policy
6-8 May 2013
World Meteorological Organization Headquarters,
Geneva, Switzerland

Permafrost is identified as an Essential Climate Variable (ECV) under the Global Climate Observing System (GCOS) and its associated organizations, and is monitored under its Global Terrestrial Network for Permafrost (GTN-P). It currently builds on two observational components: active layer (CALM) and thermal state of permafrost (TSP). The overall goal of the network is to provide key data to characterize the current state of permafrost and support regional and global assessment of changes in permafrost in polar and high-mountain regions. This requires an organized international activity to ensure appropriate site selection, standardized data collection and compilation, synthesis, analysis and reporting. GTN-P has been coordinated by the International Permafrost Association (IPA) since its establishment and is currently being consolidated by the permafrost communities. The current network includes more than 860 boreholes in both hemispheres with more than 25 participating countries. The vast majority of sites are equipped for long-term permafrost temperature observations. A borehole inventory and mean annual ground temperatures during the IPY for 600 boreholes from all permafrost areas, including locations outside the polar areas, is available online in ISO-compliant format at the National Snow and Ice Data Center (NSIDC). At present, the network of active layer thickness and shallow temperature observatories includes over 200 active-layer monitoring sites in both hemispheres. Most of these sites are re-visited on an annual basis.

The main goal of the Geneva National Correspondents Workshop on GTN-P Implementation and Data Policy is to continue the development of a long-term, international network of permafrost observatories that will provide data to document the state and changes in ground temperatures and active layer thickness. Key data will be therefore provided for testing models and scenarios of cryospheric changes and resulting impacts, providing answers to socio-economical issues directly relevant to the populations living in permafrost areas and beyond. This will generate necessary information for land management decisions including those related to development of resources and of strategies to adapt to climate change.

Although the responses of permafrost to climate changes are apparently regionally systematic over time, these responses have specific features for the different regions in the permafrost zone. This diversity in responses is driven by the differences in climate and in surface conditions (snow, vegetation, topography), as well as in subsurface material and ground ice content, geological structure, geomorphic dynamics and history of the surface disturbances. In order to understand the state and changes in the permafrost areas on Earth an effective international global monitoring strategy is required. It will provide field observations essential for the comprehensive detection of the terrestrial climate change signal, for the assessment of its lag and attenuation, and provide indications of the spatial variability of change across the high latitudes and mountain of both hemispheres. This information is critical not only for the improvement of predictive models and the reliability of impact assessments including that of the Intergovernmental Panel on Climate Change (IPCC), but also to further understand the sensitivity of permafrost conditions and processes to climate variability and change.

The main objective of the Geneva National Correspondents Workshop is the training of the National Correspondents who were recently appointed by the countries involved in GTN-P. This Workshop will help them to establish a strong national participation in this program and to actively contribute to achievement of the goals and the obligations of GTN-P.

Workshop Sponsors

We would like to thank these sponsors for their generous financial support:



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Provisional Agenda

Monday, 6 May 2013 (WMO Headquarters, Room Salle B)

- 1200 - 1300 Registration
1300 - 1315 Welcome from a WMO Official
1315 - 1330 Opening: Welcomes from the organizers, introductions, and objectives of the meeting
1330 - 1400 **Carolyn Richter**, Director, GCOS Secretariat, *Global Climate Observing System (GCOS) and GTN-P as a Part of GCOS*
1400 - 1430 **Vladimir Ryabinin**, Joint Planning Staff for the World Climate Research Programme, *WCRP and CliC: Hot Science and Cold Matters*
1430 - 1500 **Barry Goodison**, Observing and Information Systems Department, WMO, *Global Cryosphere Watch and GTN-P*
1500 - 1530 Coffee Break
1530 - 1550 **Wilfried Haerberli**, Professor emeritus at the Geography Department, University of Zurich, Switzerland, *Origin and Evolution of GTN-P - Reflections on Roots, Tasks and Challenges*
1550 - 1620 **Michael Zemp**, Director WGMS, University of Zurich, Switzerland, *Opportunities and Limitations of a Scientific Collaboration Network - Lessons Learned from the GTN-Glaciers*
1620 - 1720 **Discussion:** “*Involvement of GTN-P with various international organizations*”
Moderator: **Hugues Lantuit**, Alfred Wegener Institute, Potsdam, Germany
1720 - 1900 Reception

Tuesday, 7 May 2013 (WMO Headquarters, Room Salle B)

- 0900 - 0930 **Vladimir Romanovsky**, Chair of the GTN-P Executive Committee, *Implementation of GTN-P and Data Policy. The Role of National Correspondents*
0930 - 1000 **Gerhard Krinner**, National Center for Scientific Research, France; WMO/WCRP/CliC, *Climate Modeling Needs in GTN-P Permafrost Data and How Modelers Can Help in GTN-P Planning*
1000 - 1010 **Michel Allard**, Université Laval, Canada, *Arctic Development and Adaptation on Permafrost in Transition: field protocols and data integration*
1010 - 1200 Regional and national reports from National Correspondents - All – 3 min each
(see schedule below)
1030 - 1100 Coffee Break
1200 - 1300 **Discussion:** “*Implementation of GTN-P: National challenges and opportunities*”
Moderator: **Hanne Christiansen**, IPA, The University Centre in Svalbard, Norway
1300 - 1400 Lunch
1400 - 1510 **Kirsten Elger**, Alfred Wegener Institute, Potsdam, Germany, and **Jean-Pierre Lanckman**, The Arctic Portal, Akureyri, Iceland, *Introduction to the GTN-P Data Management System and the Online Interface for Data Upload*
1510 - 1530 Break
1530 - 1630 **Hands-on Training Seminar: How to use the GTN-P database for uploading and downloading data and other information**
1630 - 1650 Coffee Break

- 1650 - 1720 (Continue) **Hands-on Training Seminar: How to use the GTN-P database for uploading and downloading data and other information**
- 1720 - 1750 **Philippe Schoeneich**, Université Joseph Fourier, Grenoble, France, *Temperature Data Representation and Analysis: What Do We Wish to Do and to Show With the Data?*
- 1750 - 1830 **Discussion:** “Data reporting and analysis. Regional Data Centers (China, Nordic Countries, Russia, USA), Moderator: **Vladimir Romanovsky**, University of Alaska Fairbanks, USA

Wednesday, 8 May 2013 (WMO Headquarters, Room Salle B)

- 0900 - 0920 **Vladimir Romanovsky**, UAF: *Questions to be discussed*
- 0920 - 1000 **Hanne Christiansen** and **Hugues Lantuit**, International Permafrost Association, *Future Development of GTN-P, the Vision*
- 1000 - 1030 **Nikolai Shiklomanov**, George Washington University, USA, *Active Layer Thickness Data Representation and Analysis*
- 1030 - 1100 **Annett Bartsch**, Ludwig-Maximilians-University, Munich, Germany, *Complementing Field Site Records with Time Series from Satellite Data*
- 1100 - 1130 Coffee Break
- 1130 - 1300 **General discussion** and future meetings: “Role of remote sensing and modeling in GTN-P activities: Challenges and Opportunities. Next steps in GTN-P development”, Moderator: **Vladimir Romanovsky**, University of Alaska Fairbanks, USA
- 1300 Adjourn

1010 - 1204 National reports from National Correspondents - All – about 3 min each

- 1010 – 1013 Austria, **Ingo Hartmeyer**
- 1013 – 1018 Canada, **Toni Lewkowicz**
- 1018 – 1023 China, **Jin Huijun**
- 1023 – 1027 China, **Zhao Lin**
- 1027 – 1030 Denmark, **Thomas Ingeman Nielson**
- 1030 – 1100 Coffee Break
- 1100 – 1103 France, **Philippe Schoeneich** or **Xavier Bodin**
- 1103 – 1106 Germany, **Michael Krautblatter**
- 1106 – 1109 Japan, **Mamoru Ishikawa**
- 1109 – 1112 Italy, **Mauro Guglielmin**
- 1112 – 1115 Korea, **Sang Jong Park**
- 1115 – 1118 Kyrgyzstan, **Ryskul Usubaliev**
- 1118 – 1121 Norway, **Ketil Isaksen**
- 1121 – 1124 Poland, **Grzegorz Rachlewicz**
- 1124 – 1127 Portugal, **Goncalo Vieira**
- 1127 – 1137 Russia, **Dmitri Sergeev**
- 1137 – 1140 Sweden, **Margareta Johansson**
- 1140 – 1146 Switzerland, **Renald Delaloye**
- 1146 – 1154 USA, **William Cable** and **Frank Urban**
- 1154 – 1159 Antarctica, **Goncalo Vieira**
- 1159 – 1204 Svalbard, **Hanne Christiansen**