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Title

Last Name of PRESENTING Author Agapkin

Middle Name or initials of PRESENTING Author

First Name of PRESENTING Author Ivan

Country of PRESENTING Author Russia

Institution, organization or general address Vernadsky Institute of Geochemistry and Analytical Chemistry of Russian Academy of Sciences

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

Author list (in order) Agapkin Ivan*; Isaev Vladislav

Poster title (brief) Geotechnical monitoring near Hanovey test site

Abstract - text box

For the formation of the Arctic region, it is very important to assess the state of soils, to determine whether they are frozen or thawed. Their properties will vary significantly. Frozen soils are a very sensitive environment, and with the development of infrastructure, it is necessary to determine the condition of the soil base, as well as create a monitoring system that allows it to be controlled. Consider a specific problem on the example of the Hanovei test site. Thermometry and geophysics are the most useful methods.

Thermometric data from the ground is obtained by placing a string of thermistors in a borehole with a data logger with enough battery and memory storage capacity for several years at the top. The thermistors are numbered and their depth below the terrain surface is noted. Generally, as many thermistors as closely spaced as possible are desired, especially in the active layer and at the top of the permafrost, where the greatest amplitude and the greatest temperature gradient occur.

The changes in the thickness of permafrost and the distribution characteristics of ground ice are of great importance for engineering and environmental issue research in permafrost regions. Electrical resistivity techniques provide information on the electrical resistivity of the shallow subsurface. Because the electrical resistivity of earth materials strongly increases at the freezing point of water.