Title: Cryospheric Changes in Suntar-Khayata Mountains in North-East Siberia

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Due to the enhanced warming in the Arctic Regions owing to the sea-ice decrease and others processes, as a part of the global warming, other snow and ice such as glaciers are also decreasing (SWIPA, 2011) and melting region of Greenland are said to have increased in 2012.

It is very important to know the present actual condition and the speed of the changes. Research group in Japan and Russia, started to look into the present state of the glaciers of the North-East Siberia which is one of the blank area in the Arctic Region.

The glaciated area in the Sunta-Khayata Mountain Range, which exist between the large cities of Magadan in the Pacific Coast and Oimyakon known for its low air temperature, is said to be 156 km² in 1945 and decreased to 162 km² in 2002/2003 (SWIPA, 2011). This change should be accelerated during the recent ten years, due to the strong warming occurring in the 2000s. .

In-situ research in this region has been made in IGY period (1957–1959) by Russian Groups and after that, in year 2000 and 2004–2005 by joint Russian and Japanese Groups. Since old information exists in this region, this is a good area for studying cryospheric changes due to the recent strong warming.

A new project has started to observe and study the glacier basic information and their changes, the permafrost changes, and look into the future variability applying glacier models. This is a project between Cold Region Program of JAMSTEC (Yokosuka, Japan), GRENE Project of NIPR(Tokyo, Japan) and Melinikov Permafrost Institute (Yakutsk, Russia), started from 2011, and in-situ observation will be done in 2012 and 2013.

This presentation will show the research area, main objectives and preliminary results of the initiated project.