

Japan 2015

Project title	Contact	Institution - lead	Institution - other	Country - Lead	Country - oth	Project leader	Other participants	Project Period	Investigated area	Description/abstract
Cooperation on Arctic Research between Japan and Russia	Tetsuo OHATA National Institute of Polar Research ohata.tetsuo@nipr.ac.jp	National Institute of Polar Research	Archangel Scientific Center Hokkaido University Tokyo University Tohoku University National Institute for Environmental Studies Forestry and Forest Products Research Institute Japan Agency for Marine-Earth Science and Technology Nagoya University Antarctic and Arctic Research Institute Institute of Geography Institute for Biological Problems of Cryolithozone, SBRAS Melnikov Permafrost Institute, SBRAS and other many research institutes in Russia	Japan	Russia	Tesuo OHATA	Vladimir PAVLENKO	2015	Russian arctic and subarctic	Official discussion on cooperative research between Japan and Russia on Arctic research was made in the workshop held on 28-30 Oct 2014 at Tokyo. Report on the results of the discussion has been prepared.
C budget of ecosystems and cities and villages on permafrost in eastern Russian Arctic (COPERA)	Atsuko SUGIMOTO Faculty of Environmental Earth Science, Hokkaido University sugimoto@star.dti2.ne.jp Mikhail Prisyazhnyy <wirt@mail.ru>	Hokkaido University	Hokkaido University Japan Agency for Marine-Earth Science and Technology Nagoya University NorthEastern Federal University Institute for Biological Problems of Cryolithozone, SBRAS University of Fairbanks	Japan	Russia USA	Atsuko SUGIMOTO	Rikie SUZUKI Takeshi OHTA Micheal Prisyazhnyy Trofim MAXIMOV Kenji YOSHIKAWA	2015-2019	Yakutia	This is one of the projects under Belmont Forum CRA-Arctic Observing and Research for Sustainability. Carbon budget of ecosystem and emission by fule consumption are estimated. Obtained scientific data is converted to useful data and shown for stake holders with an information on expected changes in natural and social systems, and we will paves a way for collaboration of scientists with society and policy makers to show the useful information to select future options for better lives of local people.
Russia's final energy frontier – Sustainability challenges of the Russian Far North	Shinichiro TABATA Slavic-Eurasian Research Center, Hokkaido University, shin@slav.hokudai.ac.jp	Hokkaido University	University of Helsinki University of Turku University of Lapland Nihon University	Japan	Finland	Shinichiro TABATA	Veli-Pekka Tynkkynen Lassi Heininen Fujio OHNISHI Masumi MOTOMURA Natsuhiko OTSUKA	2014-2016	Russian Arctic	Sustainability of the development of the Russian Far North based on oil and gas development and Northern Sea Route is investigated. Joint field trip was carried out in Murmansk and Arkhangelsk and is planned in Yamal-Nenets region.
GRENE Arctic climate change research project: Change in the terrestrial ecosystems of the pan-Arctic and effects on climate	Atsuko SUGIMOTO Faculty of Environmental Earth Science, Hokkaido University sugimoto@star.dti2.ne.jp t.c.maximov@ibpc.ysn.ru	National Institute of Polar Research	Hokkaido University Tohoku University National Institute for Environmental Studies Forestry and Forest Products Research Institute Japan Agency for Marine-Earth Science and Technology Nagoya University Kyoto University Institute for Biological Problems of Cryolithozone, SBRAS NorthEastern Federal University Melinikov Permafrost Institute, SBRAS	Japan	Rusia	Atsuko SUGIMOTO	Mamoru ISHIKAWA Takeshi YAMAZAKI Masaki UCHIDA Masao UCHIDA Yojiro MATSUURA Rikie SUZUKI Kazuyuki SAITO Yoshihiro IJIMA Hotaek Park Takeshi OHTA Tetsuya HIYAMA Akira OSAWA Takeshi ISE T. C. Maximov A. Fedorov	2011-2015	Yakutia (central and eastern Siberia)	Observations on terrestrial ecosystem on permafrost are conducted at Yakutsk, Ust'Maya, Tura, Tiksi, and Chokurdakh, to investigate energy, water, and C fluxes, biomass, and fluxes of GHG. Permafrost monitoring network in Siberia is also established. Cooperation between observation and modering work is challenged for future prediction and global influence. Scientific works for Russian Arctic in this project is imporatr part of the whole project for pan-Arctic. Puposes of this project are (1) understanding role of terrestrial ecosystem of Arctic for polar amplification, (2) understanding material cycle in Arctic for global climate system and future change, (3) understanding current status of Arctic terrestrial ecosystem under rapidly changing Arctic climate.
GRENE Arctic climate change research project: The role of Arctic cryosphere in global change	Hiroyuki ENOMOTO National Institute of Polar Research enomoto.hiroyuki@nipr.ac.jp sugiura@sci.u-toyama.ac.jp	National Institute of Polar Research	Toyama University Meteorological Research Institute Kitami Institute fo Technology Cryolithozone, SBRAS Melinikov Permafrost Institute, SBRAS	Japan	Russia	Hiroyuki ENOMOTO	Konosuke SUGIURA Naohiko HIRASAWA Masahiro HOSAKA Shuhei TAKAHASHI T. C. Maximov A. Fedorov	2011-2015	Yakutia (central and estern Siberia)	Field and remote sensing observations on snow and glacier are conducted for eastern Siberia, to investigate glacier, precipitation, snow-cover and aerosol variations.
Land Surface Observation of Heat/Water/Vegetation Conditions in the Yakutsk Area	Rikie Suzuki Japan Agency for Marine-Earth Science and Technology rikie@jamstec.go.jp	Japan Agency for Marine-Earth Science and Technology	Japan Agency for Marine-Earth Science and Technology	Japan	Rusia	Rikie Suzuki	Hironori Yabuki Yoshihiro IJIMA Hotaek Park Konosuke SUGIURA Mamoru ISHIKAWA Takeshi YAMAZAKI Yuji Kodama T. C. Maximov A. Fedorov Pavel Konstantinov	2001-2017	Yakutsk (Taiga region in central and eastern Siberia)	Observational study of land surface hydrology, heat/water exchange and vegetation conditions on permafrost in Yakutsk region. Data base construction on soil temperature, deep ground temperature, and soil moisture content in Taiga region at Lena river Basin.
Land Surface Observation of Heat/Water/Vegetation Conditions in Yakutia	Rikie Suzuki Japan Agency for Marine-Earth Science and Technology rikie@jamstec.go.jp	Japan Agency for Marine-Earth Science and Technology	Japan Agency for Marine-Earth Science and Technology	Japan	Russia	Rikie Suzuki	Hironori Yabuki Yoshihiro IJIMA Hotaek Park Konosuke SUGIURA Mamoru ISHIKAWA Takeshi YAMAZAKI Yuji Kodama A. Fedorov Pavel Konstantinov	2000-2017	Tiksi(Tundra region in Eastern Siberia)	Observational study of land surface hydrology, heat/water on tundra region in Tiksi region. Data base construction on soil temperature, deep ground temperature, and soil moisture content in Tundra region at Lena river Basin.
Study on the forest dynamics in Siberian Taiga.	Sukachev Institute of Forest, SB RAS	Forestry and Forest Products Research Institute	Kyoto University Shinshu University Hokkaido University Okayama University	Japan	Russia	Matsuura Y	Osawa A, Kajimoto T, Morishita T, Noguchi K, Nakai Y, Yasue K, Koike T, Tokuchi N, Hirobe M	1994-2000, 2002-2007, 2008-2009, 2009-2013, 2014-2017	Tura, Central Siberia	forest biomass, CO2 flux, soil carbon storage, litterfall, fine root biomass, CH4, N2O emmission, / see Ecological Studies 209: Permafrost Ecosystems, Siberian Larch Forests, published 2010 Springer
Aircraft Monitoring by NIES	Toshinobu MACHIDA tmachida@nies.go.j	National Institite for Environmental Studies (NIES)	Institute of Atmospheric Optics, Permafrost Institute, Institute of Microbiology	Japan	Russia	Toshinobu MACHIDA	Motoki SASAKAWA, Mikhael ARSHINOV, Boris BELAN	1993-present	Surgut, Novosibirsk and Yakutsk	Air samples are collected by aircraft over the 3 sites in Siberia and are analyzed for greenhouse gases in NIES, Japan.

JR-STATION	Motoki SASAKAWA sasakawa.motoki@nies.go.jp	National Institute for Environmental Studies (NIES)	Institute of Atmospheric Optics, Permafrost Institute, Institute of Microbiology	Japan	Russia	Motoki SASAKAWA	Toshinobu MACHIDA, Mikhael ARSHINOV, Boris BELAN	2001-present	6 sites in west Siberia	CO2 and CH4 concentrations are continuously measured using 6 towers.
Geodynamics in Russian Far East	Takahashi Hiroaki Faculty of Science Hokkaido University Sapporo, Japan Hiroaki Takahashi hiroaki@mail.sci.hokudai.ac.jp	Hokkaido University	Geophysical Survey of RAS Institute of Marine Geology and Geophysics of RAS Far Eastern Federal University Institute of Applied Mathematics of RAS Institute of Tectonics and Geophysics of RAS Kagoshima University Yamagata University	Japan	Russia	Hiroaki Takahashi	Alexey Malovichko Yuri Levin Victor Chebrov Larisa Gunbina Evgeny Gordeev Victor Byov Boris Levin Mikhail Gerasimenko Nikolay Shestakov Yuichiro Tanioka Kiyoshi Yomogida Kazunori Yoshizawa Hiroaki Miyamachi Mako Ohzono	1994-	Russian Far East	Seismological and geodetic observation network for tectonics and geodynamics researches in Russian Far East have been operated.
Eruption dynamics of Klyuchevskoy volcano	Takahashi Hiroaki Faculty of Science Hokkaido University Sapporo, Japan hiroaki@mail.sci.hokudai.ac.jp	Hokkaido University	Institute of Volcanology and Seismology of RAS Kamchatka Branch of Geophysical Survey of RAS Kyushu University Kagoshima University Ibaraki University Tohoku University National Institute of Advanced Industrial Science and Technology	Japan	Russia	Nakagawa Mitsuhiro	Gordeev Evgeny Yarosrav Muravyev Victor Chebrov Natalia Malik Sergey Serovetnikov Hiroaki Takahashi Hiroshi Aoyama Hiroki Miyamachi Takeshi Matsushima Takeshi Hasegawa Yoshihiro Ishioka	2010-	Kamchatka peninsula	Geophysical and geological investigation for eruption dynamics of Klyuchevskoy volcano in Kamchatka have been carried out.
Monitoring Survey of Terrestrial Wildlife in Arctic and Subarctic Siberia	Shirow TATSUZAWA Graduate School of Letters Hokkaido University Sapporo, Japan serow@let.hokudai.ac.jp	Hokkaido University	Institute for Biological Problems of Cryolithozone, SBRAS	Japan	Russia	Shirow TATSUZAWA	Innokentiy, M. OKHLOPKOV Nilita, G. SOLOMONOV Egor, A. NIKOLAEV Egor, V. KIRILLIN Ruslan, A. KIRILLIN Nikolai, V. MAMAEV Elena I. Troeva	2009-	Arctic and Subarctic regions of Eastern Siberia (mainly Yakutia)	Satellite and terrestrial monitoring of ecological and behavioral changes of wildlife (mainly large mammals*) and proposals for their scientific conservation to regional governments have been conducted with local indigenous peoples. *: wild reindeer, muskox, bison, wolf, polar bear, brown bear, black bear