

Program for the First International Symposium on the Arctic Research (ISAR-1)

◎ = Presenter

(Tentative as of 10/29/08)

November 4-6, 2008

Miraikan, Tokyo, Japan

November 4, 2008 (Tuesday)

08:30-09:30 Registration

09:30-10:15 Opening Session

Chair: Tetsuo Ohata

Welcome Talk from Organizing Committee

Hiroshi, L. Tanaka: Mission of the ISAR-1

Welcome Talk from Sub-Committees of Science Council

Hiroshi Kanda

Congratulatory Address

Hiroshi Ikukawa for MEXT

Yoshiyuki Fujii for NIPR

Shiro Imawaki for JAMSTEC

Yasushi Horikawa for JAXA

Larry Hinzman for IARC

10:15-11:15 Session S-1: Drastic Change in the Arctic under the Global Warming

Chair: Hiroshi L. Tanaka

S1-1 ◎Mark Serreze (Keynote speaker), Andrew P. Barrett, Julienne C. Stroeve

The emergence of surface-based Arctic amplification

S1-2 ◎Koji Shimada (Keynote speaker), Takashi Kamoshida

Mechanism on further catastrophic reduction of Arctic sea ice: influence of oceanic change

11:15-11:45 Session S-1: Drastic Change in the Arctic under the Global Warming, Continued.

Chair: Hiroshi L. Tanaka

S1-3 ◎Peter Wadhams (Invited speaker)

Arctic sea ice thinning and its impact on pressure ridging

S1-4 ◎Wieslaw Maslowski (Invited speaker)

Rate and future projection of Arctic climate change – An update

11:45-12:00 Photograph

12:00-13:30 Lunch

13:30-15:00 Session S-1: Drastic Change in the Arctic under the Global Warming, Continued.

Chair: Mark Serreze

S1-5 ◎Atsumu Ohmura (Invited speaker)

Unsolved problems in Arctic climate

S1-6 ©Larry D. Hinzman (Invited speaker)

A warmer Arctic: wetter or drier?

S1-7 ©Syun-Ichi Akasofu

Need for indentifying natural components of climate change

S1-8 ©Masami Fukuda

Permafrost response under global warming trend in the Arctic

S1-9 ©Motoyoshi Ikeda

How soon will the Arctic sea ice disappear in summer?

S1-10 ©Hiroshi L. Tanaka, Masahiro Ohashi

Mechanism of the decadal-scale variation of the Arctic oscillation index

15:00-16:30 Break and Poster Session

16:30-18:30 Session S-1: Drastic Change in the Arctic under the Global Warming, Continued.

Chair: Tetsuo Ohata

S1-11 ©Jia Wang, Jinlun Zhang, Eiji Watanabe, Moto Ikeda and co-author

Arctic dipole anomaly drives the 2007 summer ice minimum

S1-12 ©William Hibler, S. Vavrus, R. Kwok

An imbedded ice ocean tidal model

S1-13 ©Hiroyoshi Hayasaka, Murad Ahmed Farukh, Alexander Fedorov, Odbayar Mishigdorj

Recent forest fire activity and precipitation

S1-14 ©Haruo Sawada, Yoshito Sawada, Yoshio Awaya, Yojiro Matsuura

Seasonal and annual changes of forest environments over 20 years in Russia

S1-15 ©Atte Korhola

Drastic climate-induced changes in Arctic freshwater ecosystems during the last 200 years

S1-16 ©Xiangdong Zhang, Asgeir Sorteberg, Jing Zhang, Rüdiger Gerdes and co-author

Recent rapid changes in atmospheric circulations: An impetus for accelerated Arctic climate system changes under global warming forcing

S1-17 Alel Wagner

withdrawn

S1-18 Roman Bekryaev

withdrawn

18:30-20:00 Banquet

Host: Yojiro Matsuura

November 5, 2008 (Wednesday)

09:00-10:30 Session G-1: Atmospheric Science

Chair: John E. Walsh

G1-1 Lingen Bian

withdrawn

G1-2 ©John E. Walsh

Attribution of recent Arctic climate change

G1-3 ©Yvan J. Orsolini, Asgeir Sorteberg

Projected changes in Arctic summer cyclones under global warming

G1-4 ©Klaus Dethloff, A. Rinke, W. Dorn, M. Mielke and co-authors

Arctic circulation modeling and observations: regional feedbacks and global links

G1-5 ©Hyo Choi, Doo Sun Choi

Generation of coastal low-level jet in the King George island, Antarctica

G1-6 ©Yoshio Asuma, Shuhei Takahashi

Vapor budget analysis around No.31 glacier in the Eastern Siberia

10:30-11:00 Break

11:00-12:00 Session G-1: Atmospheric Science, Continued.

Chair: Isao Murata

G1-7 Mu Qiao

withdrawn

G1-8 ©Andreas Bodo Herber, K. Dethloff, Ch. Haas, D. Steinhage and co-authors

POLAR5-a new research aircraft for improved access to the Arctic

G1-9 ©Hideaki Nakajima, Kosuke Saeki, Isao Murata, Tomoo Nagahama

Bi-polar polar stratospheric cloud (PSC) observations related to polar ozone depletion with FTIR spectrometer at Ny-Aalesund, Svalbard

G1-10 ©Chandrashekhar Deshpande

withdrawn

12:00-13:30 Lunch

13:30-15:30 Session G-2: Ocean and Sea Ice

Chair: Koji Shimada

G2-1 ©Thomas Agnew, Andrew Lambe, Linda Enciu, David Long

Sea ice exchange between the Canadian Archipelago, Arctic Ocean and Baffin Bay using enhanced AMSR-E imagery

G2-2 ©Noriaki Kimura

Interannual change in the ice-motion field in the Arctic

G2-3 Vladimir Ivanov, Eddy Carmack, ©Igor Polyakov,

Vertical heat and salt exchange in the Laptev Sea

G2-4 ©Igor Polyakov (Invited speaker)

Recent changes in the Arctic Ocean: Effects of long-term change and variability

G2-5 Hugues Lantuit

withdrawn

G2-6 ©Kohei Mizobata, Koji Shimada

Estimation of ice area export through Fram Strait

G2-7 ©Hiroyuki Enomoto, Kazutaka Tateyama, Yongwon Kim, Shuhei Takahashi and co-authors

Melting and property changes of Arctic sea ice and snow

G2-8 ©Eiji Watanabe, Hiroyasu Hasumi

Pacific water transport in the Arctic ocean in a variable GM diffusivity model

15:30-17:00 Break and Poster Session

17:00-18:30 Session G-4: Ice Sheets and Glaciers

Chair: Kumiko Goto-Azuma

Session G-7: Integrated Modeling Studies

Chair: Kazuyuki Saito

G4-1 ©Jon Ove Hagen (Invited speaker)

Arctic glaciers and ice caps- impacts on global sea level

G4-2 ©Jacek Jania, Malgorzata Blaszczyk

Dynamics of tidewater glaciers in Svalbard derived from pattern of crevasses

G4-3 ©Ralf Greve

Increased Future sea level rise due to rapid decay of the Greenland ice sheet?

G4-4 ©Jay Zwally, Anita C. Brenner, Helen G. Cornejo, Mario B. Giovinetto and co-authors

Greenland Ice sheet mass balance: Increasing rate of mass loss

G7-1 ©José Rial, Raj Saha

Stochastic resonance, frequency modulation and the mechanisms of abrupt climate change in the Arctic

G7-2 ©Seong-Joong Kim, Junmei LÜ, Bang-Yong Lee

The Arctic climate variability in the past and its implication to future change

November 6, 2008 (Thursday)

09:00-10:30 Session G-3: Hydrology, Permafrost and Snow Cover

Chair: Takeshi Ohta

G3-1 ©Charles J Vörösmarty, A. David McGuire, E. Rastetter, J. Hobbie

The United States Arctic Research Commission scaling study

G3-2 ©Alexander Georgiadi, Irina P. Milyukova, Ekaterina A. Kashutina

Sensitivity of river runoff in Eastern Siberia to recent and projected global climate warming

G3-3 ©Olga Semenova

Modeling of runoff formation processes for Lena river basin

G3-4 ©Hotaek Park, Yoshihiro Iijima, Hironori Yabuki, Tetsuo Ohata

Modeling tempo-spatial dynamics of water, energy, and CO₂ fluxes in eastern Siberia

G3-5 ©Jian Wang, Tao Che, Xin Li, Rui Jin and co-authors

An introduction on cold region hydrology experiment (CRHE) of water in Heihe Basin China

G3-6 ©Maximo Larry Lopez Caceres, G. Guggenberger, R. Hatano, E. Gerasimov and co-author

Is forest fire a problem in eastern Siberia?

10:30-11:00 Break

11:00-12:00 Session G-3: Hydrology, Permafrost and Snow Cover, Continued.

Chair: Takeshi Yamazaki

G3-7 ©Daqing Yang, Douglas Kane, Sveta Berezovskaya, Shiaoqing Ge

Hydroclimatic changes in the large northern watersheds - review and new result for Yukon river

G3-8 ©Kunio Rikiishi, Risa Obama

Earlier disappearance of snow cover in the Northern Hemisphere as revealed by satellite observations through visible and micro-wave radiometers

G3-9 ©Xiaohua Hao, Jian Wang, Zhe Li

In-situ measured the spatial distribution and properties of snow in Qilian mountains——Binggou watershed

G3-10 ©Kazuyoshi Suzuki, Tetsuo Ohata

Recent advance in snow hydrology in the forest -Effect of land use change-

12:00-13:30 Lunch

13:30-15:00 Session G-5: Terrestrial Ecosystem and Greenhouse Gas

Chair: Yojiro Matsuura

G5-1 ©Martha Shulski (Invited speaker), David R. Klein, John E. Walsh

Weather extremes and population extinction in the Bering Sea

G5-2 ©Elena Patova, Michail Sivkov, Ekaterina Kulugina, Anna Patova,

Withdrawn

G5-3 ©Akihiko Ito

Model analysis on the variability of terrestrial carbon budget in response to Arctic Oscillation

G5-4 ©Hisashi Sato, Hideki Kobayashi, Nicolas Delbart

Simulation study of the vegetation structure and function in eastern Siberian larch forests using the dynamic vegetation model SEIB-DGVM

G5-5 ©Kenji Kimura, Toshihisa Honma

Building the wildfire expansion simulation in Alaska

G5-6 ©Ken'ichi Honda, Keiji Kimura, Toshihisa Homma

A study of wildfire detection in Alaska by using MODIS data

15:00-15:20 Break

15:20-16:20 Session G-6: Marine Ecosystem

Chair: Sei-Ichi Saitoh

G6-1 ©Shigeto Nishino, Koji Shimada, Motoyo Itoh, Sanae Chiba

Formation of vertical silicate maxima associated with sea-ice reduction in the western Arctic Ocean

G6-2 ©Meibing Jin, Clara Deal

A coupled ice-ocean ecosystem model and its 1-D and 3-D applications in the Bering and Chukchi Seas

G6-3 ©Takashi Uyama, Keiko Sekiguchi, Kenji Yamashiro, Yasuhiro Sakurai

The result of Cetacean sighting survey in the Chukchi Sea during T/S Oshoro Maru 2007 IPY cruise; a special focus on killer whale predations

G6-4 ©Sang Heon Lee, Terry Whiteledge, Sung Ho Kang

Recent primary production patterns of phytoplankton in the Western Arctic Ocean

16:20-17:50 Session S-2: International Cooperation of Arctic Research and IPY

Chair: Hiroshi Kanda, Takashi Yamanouchi

S2-1 ©Takeshi Naganuma (Invited speaker), Annick Wilmotte

MERGE: pole-to-pole, microbe-to-globe project of IPY

S2-2 ©Jennifer Hutchings, C. Geiger, A. Roberts, J. Richter-Menge and co-authors

Investigating the dynamic component of the sea ice mass balance

S2-3 ©Sei-Ichi Saitoh, Toru Hirawake

Preliminary results from the Oshoro-Maru IPY cruises in summer 2007 and 2008

S2-4 ©Yeadong Kim (Invited speaker), Takashi Yamanouchi

AFOPS Strategy to take the initiative in international polar communities

S2-5 ©Renate Treffeisen, P. Lemke, K. Dethloff

The new regional climate office for polar regions and sea level rise

S2-6 ©Tetsuo Ohata

Consideration on structure of Arctic Research in Japan

17:50-18:30 Closing Session

Chair: Takashi Yamanouchi

C-1 Summary of the symposium

Report from the chairs

Discussions

C-2 Best student presentation award

C-3 Tetsuo Ohata

Closing talk by the organizing committee

Poster Session

November 4 to November 5 morning session

Session S-1: Drastic Change in the Arctic under the Global Warming

P101 ©Sergey Razumov

Consequences of cryogenic processes activation in the east Arctic in connection with changes of a regional climate

P102 ©Masaki Kanao, S. Tsuboi, R. Butler, T. Larsen and co-author

Planning of the Greenland ice sheet monitoring network (GLISN) for observing global warming

P103 Barry Zellen

withdrawn

P104 Barry Zellen

withdrawn

P105 ©Takeshi Ise, Paul R. Moorcroft

High temperature sensitivity of peat decomposition due to physical-biogeochemical feedback

P106 ©Stepan P.Varlamov, Pavel N.Skryabin

The effect of 2001-2002 forest fires on permafrost in central Yakutia

P107 ©Irina Beldiman

Hydrological processes simulation for permafrost zone by the example of Kolyma river basin

P109 ©Masahiro Hori, Hideyuki Fujii

Satellite monitoring of the recent drastic changes in the Arctic sea-ice and surrounding environment

P110 ©Mikhail N. Grigoriev, Rudolf V. Zhang

Drastic change of coastal permafrost processes under recent warming within the East Siberian arctic region

P111 ©Jay Zwally, Donghui Yi, Ron Kwok, John Robbins

Rapid decline in volume of Arctic summer sea ice

Session G-1: Atmospheric Science

P112 ©Maria K. Gavrilova

Withdrawn

P113 ©Yutaka Matsumi, Julie K.Pearce, Tomoki Nakayama

Real-time measurements of atmospheric CO₂ isotope ratios (¹³C, ¹⁸O) using mid-IR QCL laser absorption spectroscopy

P114 R. Senan, R. Benestad, ©Yvan Orsolini, M. Balmaseda and co-author

Arctic seasonal predictability associated with polar sea-ice

P115 ©Mio Matsueda, Ryo Mizuta, Shoji Kusunoki

Future change in atmospheric blocking simulated by 20-km mesh atmospheric global circulation model

P116 ©David Atkinson, Stanislav Ogorodov, Hugues Lantuit

Erosion of permafrost coasts in the Arctic: mechanisms and trends

P117 ©Renate Treffeisen, J.F. Gayet, A. Minikin, J. Ström and co-authors

On the onset of the ice phase in boundary-layer Arctic clouds

P118 ©Masaki Ikeda, Hiroshi L. Tanaka

Positive feedback between polar jet and polar mode of the Baroclinic instability

P119 ©Shinji Takahashi, Hiroshi L. Tanaka

Dynamics and statistics of cyclones over the Arctic ocean compared with extra-tropical cyclones

P120 ©Haibo Zhao, Jungang Miao

withdrawn

vapor retrieval in above ice surface

P121 ©Masahiro Ohashi, Hiroshi L. Tanaka

Analysis of arctic oscillation simulated by global warming prediction models

P122 ©Keiichi Kondo, Hiroshi L. Tanaka

Influence of local ensemble transform Kalman filter with the NICAM on high latitudes

P123 ©Koji Terasaki, Hiroshi L. Tanaka

Spectral energetics analysis of the general circulation of the atmosphere in the vertical wavenumber domain

P124 ©Fuyuki Fujiwara, Hiroshi L. Tanaka

Interaction between the baroclinically unstable wave and the subtropical and polar-frontal jets

P125 ©Jun Inoue, Takeshi Enomoto, Takemasa Miyoshi, Shozo Yamane

The impact of the assimilation of Arctic buoys in ALERA

P126 ©Shingo Kato, Hiroshi L. Tanaka

Prediction experiments of the Arctic oscillation index using a barotropic general circulation model

P127 ©Kumiko Goto-Azuma, Takayuki Shiraiwa, Sumito Matoba, Takahiro Segawa and co-authors

Climate and environmental variability in the North Pacific region during the past 100 years

P128 ©Mayumi Seta, Hiroshi L. Tanaka

Research of forcing sources causing the blocking high related to the Okhotsk high

P129 ©Yoshiki Fukutomi, Kooiti Masuda, Tetsuzo Yasunari,

Cyclone activity associated with the interannual variability of summer precipitation over northern Eurasia

P130 ©Piotr Glowacki, Jacek A. Jania

Nature of rapid response of glaciers to climate warming in Southern Spitsbergen, Svalbard

Session G-2: Ocean and Sea Ice

P131 ©Gleb Panteleev, D.Nechaev, V.Luchin, P. Stabeno and co-authors

Toward development of the 4Dvar data assimilation system in the Bering Sea

P132 ©Gleb Panteleev, A. Proshutinsky, T. Kikuchi, Nechaev, and co-author

Reanalysis of the Arctic ocean: case study for the Chukchi and East Siberian seas

P133 ©Maxine Von Eye

Historical Sea Ice in the Greenland Sea

P134 ©Yukimasa Adachi, Seiji Yukimoto, Masakazu Sueyoshi

Sea ice mean thickness over the north polar cap simulated in the CMIP3 CGCMs for the end of 20th Century

P135 ©Zhongyong GAO, Liqi Chen

withdrawn

P136 ©Sergey V. Pisarev

T,S characteristics of the northern part of the Amundsen basin during 2007-2008. The changes that started in

1990-th are countinuing

P137 Vijay Kumar

withdrawn

P138 ©Masao Uchida, Motoo Utsumi, Hidetoshi Kumata, Ayuri Matsuda and co-author

Molecular markers of archaeal tetraether lipids from the Chukchi Sea shelf sediments: Potential Proxy for past terrestrial and marine environmental changes

P139 ©Takahiro Iida, Kohei Mizobata, Mitsuhiro Toratani, Sei-Ichi Saitoh

The relationship between the climate variability and development mechanisms of spatio-temporal *Emiliana*

huxleyi blooms in the eastern Bering sea shelf

P140 ©Tomomi Nakamura, Jing Zhang, Hisashi Narita

Water mass characterization and seasonal and annual variations in the Southeastern Bering Sea

P141 ©Motoyo Itoh, Koji Shimada, Takashi Kamoshida, Shigeto Nishino

Decreasing of cold and saline shelf water formation in the Chukchi sea

P142 ©Kazutaka Tateyama, Hiroyuki Enomoto

Field report from the CHINARE2008 Arctic cruise

P143 ©Miklós Kázmér

Withdrawn

P144 ©Jiuxin Shi, Jinping Zhao, Shujiang Li, Shaojun Zheng

Watermasses in the Canada basin and their recent variations

Session G-4: Ice Sheets and Glaciers

P145 Steven Palmer

withdrawn

P146 ©Hideaki Motoyama, Kokichi Kamiyama, Okitsugu Watanabe, Makoto Igarashi and co-author

Studies on global warming in 1920's using various ice cores in the Arctic

P147 ©Jun Uetake, Takeshi Naganuma, Martin Bay Hebsgaard, Hiroshi Kanda and co- author

Snow algal communities on the glaciers in West Greenland

P148 ©Keiko Konya, Tsutomu Kadota, Tetsuo Ohata

Mass balance of Potanin glacier, Mongolia Altai revealed by field observation at ablation area

P149 ©Shuhei Takahashi, Konosuke Sugiura, Takao Kameda, Hiroyuki Enomoto and co-authors

Outline of glaciological activities, in Suntar-Khayata range, Eastern Siberia, from IGY to IPY

Session G-7: Integrated Modeling Studies

P150 ©Kazuyuki Saito

Impact of subsurface hydro-thermal representations on the atmospheric hydroclimate

P151 ©Masatake Hori

withdrawn

November 5 afternoon session to November 6

Session S-1: Drastic Change in the Arctic under the Global Warming

P108 ©José A. Rial, Chuanhai Tang, Koni Steffen

Greenland's glacial rumblings: Indicators of rapid ice sheet response

Session G-3: Hydrology, Permafrost and Snow Cover

P201 ©Takeshi Yamazaki, Yoshihiro Iijima, Mamoru Ishikawa

Simulations and process studies on recent moistening and thawing of soil in eastern Siberia

P202 ©Alexander Fedorov, Go Iwahana, Yoshihiro Iijima, Hironori Yabuki

Drastic change in the Siberian region under the global warming

P203 ©Roman V. Desyatkin, P.P. Fedorov, A.R. Desyatkin

Water regime of forest soils in cryolithozone under the global change

P204 ©Pavel Fedorov, R.V. Desyatkin, A.R. Desyatkin, A.N. Nikolaev

Relation of larch radial increment with the soil moisture in Central Yakutia

P205 ©Vladimir Rusakov, M. Fukuda L.I. Shipitsina

Near-surface permafrost monitoring and ground temperature trends in Tiksi, Arctic Russia

P206 ©Yuki Sawada, Koichiro Harada, Mamoru Ishikawa, Yoshiyuki Ishii and co-authors

Difference on the active layer characteristics between burned and unburned sites in poker flat research range, interior Alaska

P207 ©Masahiro Hosaka

MRI new land surface scheme for global warming simulation

P208 ©Yoshihiro Iijima, Tetsu Nakamura, Yoshihiro Tachibana, Alexander N. Fedorov and co-author

Recent hydroclimatic change in relation to permafrost degradation in eastern Siberia

P209 ©Tomoyuki Wada, Yongwon Kim, Kazuhisa A. Chikita, Hiroyuki Miyazaki

The sources of sediment and particulate organic matters in the glacial Tanana river, Alaska

P210 ©Akhat A. Akhmetshin, Vladimir A. Grigoryev, Vill S. Yakupov

Monitoring of cryolithozone and dynamics of its change

P211 Akhat A. Akhmetshin

Withdrawn

P212 ©Zakir Hussain Dahri, Bashir Ahmad, Joseph Leach

Withdrawn

P213 ©Mateusz Strzelecki

Geocosystem of polar coast under global change conditions - the clash between neglect and future challenge in polar geosciences.

P214 ©Hironori Yabuki

The long term monitoring of deep ground temperature in tundra region, eastern Siberia

P215 ©Ivan Dorofeev

Present state of frozen ground in the Aldan upland, Yakutia

P216 ©Yinsheng Zhang, Yanjun Guo, Tetsuo Ohata

Variability of Northern Eurasia snow cover in passed 40 years

P217 ©Kazuo Takeda, Hiroji Fushimi, Tatuo Kira

Recent rise of water level in lake Hovsgol, in the permafrost zone of Northern Mongolia - trends and causal factors-

P218 ©Hongyi Li, Jian Wang

Simulating and analyzing of the snowmelt runoff in the upper Heihe basin in Northwestern China

P219 ©Hiroyuki Tsutui, Toshio Koike

Long-term annual variation of snow depth in Northern Hemisphere based on SSM/I

P220 ©Yuji Kodama, Shiro Tsuyuzaki, Keiji Kushida

Change of surface albedo and planet cover after 2004 wildfire in a black spruce forest in interior Alaska

P221 ©Konosuke Sugiura, Tetsuo Ohata

Global-scale characteristics of the total transport rate distribution of blowing snow

P222 ©Daqing Yang, Douglas Kane, Sveta Berezovskaya, Shiaqing Ge and co-author

Hydroclimatic changes in the large northern watersheds - review and new result for Yukon river

Session G-5: Terrestrial Ecosystem and Greenhouse Gas

P223 ©Takashi Osono

Estimation of the decomposition rates of dead woody stems of *Salix arctica* in recently-deglaciated area in

Canadian high arctic using radiocarbon (¹⁴C)

P224 ©Masaki Uchida, Masao Uchida, Takayuki Nakatsubo, Hiroshi Kanda

Microbial activity and decomposition characteristics in a raised beach deposit under terrestrial vegetation on

the high Arctic deglaciated area

P225 ©Takeshi Ueno, Takeshi Osono, Hiroshi Kanda

Comparison of element stoichiometry between bryophytes and vascular plants in a Canadian high Arctic tundra

P226 ©Masao Uchida, Masaki Uchida, Hidetoshi Kumata, Yoshiyuki Takahashi

Heterotrophic microbial decomposition of ancient carbon in the soil sequence after the glacier retreat, Svalbard, Norway Arctic

P227 ©Naoko Kan, Masaki Uchida, Hiroshi Koizumi, Shinpei Yoshitake and co-authors

CO₂ emission from plant litter during winter on a deglaciated area, Ny-Ålesund, Svalbard

P228 ©Miyuki Kondo, Masao Uchida, Masaki Uchida, Shinpei Yoshitake and co-authors

Elemental and isotopic signatures of soil organic carbon and its relation to vegetation in a successional glacier foreland in Ny-Ålesund, Svalbard

P229 ©Yojiro Matsuura, T. Kajimoto, A. Osawa, T. Koike and co-authors

Soil carbon storage in Russian northern forest ecosystems

P230 ©Makoto Kobayashi, Bruanin S.V., Nemilostiv Y.P., Prokopchuk, V.F. and co-authors

The carbon accumulation rate in mixed conifer-broad leaved forests in the southern part of Russian Far East

P231 ©Alexey Desyatkin, Fumiaki Takakai, Pavel Fedorov, Roman Desyatkin and co-author

Effect of thermokarst different stage on CH₄ emission in central Yakutia, Russia

P232 ©Yongwon Kim, Yuji Kodama, Mamoru Ishikawa

Regulating factors on continuous winter CO₂ flux in black spruce forest soils, interior Alaska

P233 ©Masahito Ueyama, Yoshinobu Harazono

Carbon exchange and the controlling factors in a black spruce forest in interior Alaska during five years of observation

P234 Yoshinobu Harazono

withdrawn

P235 ©Yoshinobu Harazono, Nana Nishida, Masahito Ueyama, Yoshiaki Kitaya and co-author

Regional estimation of CO₂ budget over arctic wet tundra by applying MODIS-visible bands

P236 ©Mamoru Ishikawa

Physical settings and long-term trend of the forests on the Eurasian ecotone, Mongolia

P237 ©Hideki Kobayashi, Rikie Suzuki, Shiho Kobayashi

Seasonality of the satellite-observed reflectance and its relation to the larch canopy leaf area index in East Siberia

P238 ©Rikie Suzuki, Yongwon Kim, Reiichiro Ishii

Ground-based forest survey for biomass estimation by ALOP/PALSAR over boreal forest in Alaska

P239 ©Keiji Kushida, Yongwon Kim, Shiro Tsuyuzaki and Masami Fukuda

Spectral vegetation indices for estimating shrub cover, green phytomass and leaf turnover in a sedge-shrub

tundra

P240 ©Koichi Edagawa, Keiji Kimura, Toshihisa Honma

Local-scale weather simulation related to large wildfire in Alaska

P241 ©Koji Nakau, Masami Fukuda, Yumiko Nagamine

Improvement of wild fire detection algorithm for arctic region

P242 ©Tomoya Ogawa, Keiji Kimura, Toshihisa Honma,

First spread termination of boreal wildfire with GIS analysis

P243 ©Elizabeth Bella

withdrawn

P245 ©Takayuki Nakatsubo, Hiroyuki Muraoka, Masaki Uchida

Response of net ecosystem production to climate change in a high Arctic glacier foreland: a model prediction

P246 ©Motoko Inatomi, Akihiko Ito

Terrestrial greenhouse gas budget using a coupled carbon and nitrogen cycles model

VISIT: estimation of greenhouse gas budget in northern hemisphere

P255 ©S.M. Singh, R. Ravindra

Impact of climate change on lichen diversity of Ny Alesund Arctic and Larsemann Hills Antarctic

Session G-6: Marine Ecosystem

P247 ©Mitsuko Obata, Satoru Taguchi

Does warm climate affect on ice algal community in the temperate sea ice?

P248 ©Clara J. Deal, Meibing Jin, Rolf Gradinger

Modeling microbial food web dynamics in Arctic Sea ice

P249 ©Elena Bondareva

Nutrient budgets investigations on the Chukchi Sea shelf

P250 ©Haruki Senoo, Heidi L. Wold, Jan Øivind Moskaug, Katsuyuki Imai and co-authors

Signs of toxicity from combined accumulation of vitamin A, persistent organic pollutants, and climate changes in arctic top predators

P251 ©Sei-Ichi Saitoh, I Nyoman Radiarta, Toru Hirawake, Yasuhiro Sakurai and co-authors

Biodiversity change of demersal fish community in the northern Bering and Chukchi Seas

P252 ©Jingfeng Wu, Ana Aguilar-Islas, R. Rember

Sea ice-derived dissolved iron and its potential influence on the spring algal bloom in the Bering Sea

Session S-2: International Cooperation of Arctic Research and IPY

P253 ©Takashi Yamanouchi

New Direction of Interdisciplinary Research Project of the Arctic, "Arctic Change - Past, Present and Future"

P254 ©Hiroshi Kanda, Masaki Uchida

The IPY project, "Tundracycle", estimating vegetation change and carbon flow in the high Arctic