Oral session

April 28, 2015 (Tuesday), Room 202

13:45-15:15 A1: Understanding the Arctic climate change and its global influences: Japan's contributions and suggestions for the future

Main Convener: Kumiko Takata
Chair: Takashi Yamanouchi

13:45-13:55 Introduction of the session
H. Enomoto

13:55-14:15 A01-O01 TOWARDS AN ICE-FREE ARCTIC OCEAN IN SUMMERTIME
J. C. Gascard*, M. Rafizadeh

14:15-14:30 A01-O02 A MODELING STUDY ON THE INFLOW OF THE ATLANTIC WATER AT THE FRAM STRAIT
T. Kawasaki*, H. Hasumi

14:30-14:45 A01-O03 THE EFFECT OF REMOTE FORCING AND LOCAL FEEDBACK ON THE ARCTIC WARMING UNDER THE ELEVATED ATMOSPHERIC CO2 CONCENTRATION
M. Yoshimori*, A. Abe-Ouchi

14:45-15:00 A01-O04 MODULATION OF THE ARCTIC LINKAGES ON ATMOSPHERIC ENERGY TRANSPORT IN NORTHERN HIGH LATITUDES

15:00-15:15 A01-O05 GLACIER DYNAMICS NEAR THE CALVING FRONT OF BOWDOIN GLACIER, NORTHWESTERN GREENLAND

April 28, 2015 (Tuesday), Room 202

15:45-17:15 Chair: Kumiko Takata

15:45-16:00 A01-O06 A BIOLOGICAL CONTRIBUTION TO PARTIAL PRESSURE OF CO2 IN THE WESTERN ARCTIC OCEAN AND BEARING SEA

16:00-16:15 A01-O07 CONTINUOUS MEASUREMENTS OF THE ATMOSPHERIC O2/N2 RATIO AT NY-ÅLESUND, SVALBARD
D. Goto*, S. Morimoto, S. Aoki, T. Nakazawa, P. K. Patra

16:15-16:30 A01-O08 SPATIAL AND TEMPORAL PATTERNS ON TREE-RING DELTA-13C AND TREE GROWTH OVER THE PAST 100 YEARS IN CIRCUM-ARCTIC ECOSYSTEMS
S. Tei*, A. Sugimoto, M. Liang, Y. Matsuura, A. Osawa, H. Yonenobu, T. C. Maximov

16:30-16:45 A01-O09 IMPACTS OF FUTURE CLIMATE CHANGE ON ARCTIC TERRESTRIAL ECOSYSTEMS: AN ANALYSIS BASED ON ISI-MIP
A. Ito*, H. Noda, K. Nishina

16:45-17:00 A01-O10 DETECTION OF TRENDS IN CO2 VERTICAL PROFILES DUE TO BIOSPHERIC AND ANTHROPOGENIC FLUX CHANGE
P. K. Patra*

17:00-17:15 A01-O11 EFFECTS OF BLACK CARBON ON THE CLIMATE OF THE ARCTIC - CURRENT STUDIES AND FUTURE PLANNING -
Y. Kondo*, M. Koike, J. Ukita

April 27, 2015 (Monday), Room 201

14:00-15:30 A2: Paleoclimatic perspective on Arctic changes and polar amplification

Main Convener: Kawamura Kenji

14:00-14:15 A02-O01 THE DYNAMIC ARCTIC
O. Ingolfsson

14:15-14:30 A02-O02 A MULTIDISCIPLINARY, PAN-ARCTIC NETWORK FOR RESEARCHING ARCTIC PALAEOCLIMATE
K. O. Strand*, C. O'Cofaigh

14:30-14:45 A02-O03 THE ‘LITTLE ICE AGE’ WARMING IN THE WEST GREENLAND WATERS BASED ON DIATOM MICROFOSSILS
D. W. Krawczyk
14:45-15:00 A02-O04
15:00-15:15 A02-O05 INSOLATION CONTROL ON THE BEAUFORT GYRE DYNAMICS DURING THE HOLOCENE
M. Yamamoto*
15:15-15:30 A02-O06 THE FLEETING GLACIERS OF THE ARCTIC
O. Pausche*, J. Bakke

April 27, 2015 (Monday), Room 201

16:00-17:30

16:00-16:15 A02-O07 THE LATE QUATERNARY OF ARCTIC CANADA: THE INTERPLAY OF CLIMATE, SEA-
LEVEL, ICE, AND OCEANS
A. J. Pienkowski*, M. F. A. Furze
16:15-16:30 A02-O08 THE FENNOSCANDIAN ICE SHEET AS A TRIGGER FOR DANSGAARD-OESCHGER CYCLES
K. H. Nisancioglu*, T. M. Dokken
16:30-16:45 A02-O09 THE INFLUENCE OF GLACIAL ICE SHEETS ON ATLANTIC MERIDIONAL OVERTURNING
CIRCULATION THROUGH ATMOSPHERIC CIRCULATION CHANGE UNDER GLACIAL
CLIMATE
S. Sherriff-Tadano*, A. Abe-Ouchi, M. Yoshimori, A. Oka, W.-L. Chan
16:45-17:00 A02-O10 VARIABILITY OF TERRESTRIAL BIOGENIC IONS OVER THE PAST 128,000 YEARS FROM A
DEEP ICE CORE DRILLED AT NEEM, GREENLAND
17:00-17:15 A02-O11 TOC FLUCTUATION OF MD01-2407 CORE FROM JAPAN SEA AS A PROXIES OF
GREENLAND ICE SHEET IN THE GLACIAL PERIODS FOR THE PAST 640 KA
F. Kumon*, Y. Takizawa
17:15-17:30 A02-O12 DRIVERS AND MECHANISMS FOR ENHANCED MID-PLIOCENE SUMMER MONSOON
PRECIPITATION OVER EAST ASIA SIMULATED IN THE PLIOMIP
Y. Sun'

April 27, 2015 (Monday), Room 202

14:00-15:30 A4: Geospace over and related to the Arctic region
Main Convener: Yasunobu Ogawa
Chair: Yasunobu Ogawa

14:00-14:20 A04-O01 NEUTRAL DYNAMICS IN THE CANADIAN ARCTIC UPPER ATMOSPHERE
W. E. Ward*, A. Manson, M. Shepherd, Q. Wu, J. Drummond
14:20-14:35 A04-O02 THERMOSPHERE-MESOSPHERE-STRATOSPHERE COUPLING DURING STRATOSPHERIC
SUDDEN WARMINGS
Y. Orsolini*, V. Limpasuwan, D. Kinnison
14:35-14:55 A04-O03

14:55-15:15 A04-O04 LONG-TERM TREND OF THE THERMOSPHERE CAUSED BY ANTHROPOGENIC
INCREASES OF GREENHOUSE GASSES SIMULATED BY THE GAIA
Y. Miyoshi*, H. Jin, H. Fujimara, H. Shinagawa
15:15-15:30 A04-O05 LONG-TERM TRENDS IN IONOSPHERIC PARAMETERS MEASURED BY THE EISCAT
RADARS
L. M. Bjoland*, V. Belyey, U. P. Loevaug, C. L. Hoz

April 27, 2015 (Monday), Room 202

16:00-17:30

Chair: Heinselman Craig

16:00-16:15 A04-O06 THE ROLE OF ENERGETIC PARTICLE PRECIPITATION IN COUPLING BETWEEN
GEOSPACE ENVIRONMENT, ATMOSPHERE AND CLIMATE
E. Turunen*, A. Kero, P. Verronen, A. Seppala, M. Andresson, S.-M. Salmi, C. Rodger, M. Clilverd
16:15-16:30 A04-O07 GEOSPACE EXPLORATION PROJECT: ERG
Y. Miyoshi

16:30-16:45 A04-O08 RADIATION DOSE OF AIRCREWS DURING A SOLAR PROTON EVENT WITHOUT GROUND-
LEVEL ENHANCEMENT
R. Kataoka*, Y. Nakagawa, T. Sato
16:45-17:00 A04-O09 CORONAL BEHAVIOR BEFORE THE LARGE FLARE ONSET AND ITS IMPACT ON EARTH'S
ENVIRONMENT
S. Imada'
17:00-17:15 A04-O10 CME FRONT AND SEVERE SPACE WEATHER
AN EXTENSIVE SURVEY OF THE OPTICAL STRUCTURES OF THE DAYSIDE DIFFUSE AURORA
D. Han*, X. Chen, Q. Qiu, H. Hu, H. Yang

April 28, 2015 (Tuesday), Room 202
10:45-12:15 Chair: Esa Turunen

10:45-11:05 A04-O12 EISCAT 3D, A NEW INCOHERENT SCATTER RADAR FOR GEOSPACE RESEARCH IN THE NORDIC REGION
C. J. Heinselman*

11:05-11:20 A04-O13 NEW HORIZON OF ATMOSPHERIC AND GEOSPACE SCIENCES IN THE ARCTIC WITH EISCAT 3D - JAPAN'S CONTRIBUTIONS -

11:20-11:35 A04-O14 EISCAT 3D SCIENCE TOPICS RELATED TO THE ARCTIC GEOSPACE
J. Kero*, E. Belova, J. Hedin, A. Pellinen-Wannberg, H. Nilsson

K. Shiokawa*, K. Georgieva

11:55-12:15 A04-O16 JAPANESE SOUNING ROCKET EXPERIMENTS IN THE ARCTIC
T. Abe*, Y. Saito, N. Ishii

April 30, 2015 (Thursday), Room 205
10:45-12:15 A5: The Climatic Threat from Arctic Offshore Methane
Main Convener: Peter Wadhams
Chair: Peter Wadhams, Jeremy Wilkinson

10:45-11:15 A05-O01 DECADAL PROGRESS IN QUANTITATIVE ESTIMATE OF METHANE FLUXES FROM THE EAST SIBERIAN ARCTIC SHELF
N. Shakhova*, I. Semiletov, V. Yusupov, A. Salyuk, A. Salomatin, D. Chernykh, D. Kosmach, O. Gustafsson

11:15-11:30 A05-O02 EVOLVING ICE AND OCEAN CONDITIONS IN THE EAST SIBERIAN AND LAPTEV SEAS RELEVANT TO METHANE EMISSIONS
P. Wadhams

11:30-11:45 A05-O03 GAS HYDRATE STABILITY ZONE ASSOCIATED WITH SUBSEA PERMAFROST THAWING IN THE CANADIAN BEAUFORT SEA INFERRED FROM MARINE HEAT FLOW MEASUREMENTS
Y. G. Kim*, Y. K. Jin, J. K. Hong

11:45-12:00 A05-O04 RELATIONSHIP BETWEEN CH4 AND CO2 IN THE SURFACE SEAWATER IN THE WESTERN ARCTIC OCEAN

12:00-12:15 A05-O05 METHANOGENETIC DIVERSITY AND ACTIVITY IN THE FOREHEAD OF AUSTRE LOVÊN BREEN AND MIDRE LOVÊN BREEN GLACIER
H. Ma*, Y. Zhang, X. Chen, W. Yan

April 29, 2015 (Wednesday), Conference Hall
13:45-15:00 A6: Climate and ecosystem vulnerability in the terrestrial northern high-latitudes
Main Convener: Iijima Yoshihiro
Chair: Yongwon Kim

13:45-14:03 A06-O01 MONITORING ARCTIC GREENHOUSE GAS EMISSIONS USING TOP-DOWN APPROACHES
L. M. Bruhwiler*, E. J. Dlugokencky

14:08-14:21 A06-O02 REGIONAL SCALING OF AIRBORNE FLUX MEASUREMENTS OVER ARCTIC REGIONS
A. Serafimovich*, S. Metzger, J. Hartmann, K. Kohner, S. Weneke, T. Sachs

14:21-14:39 A06-O03 CHANGES IN ARCTIC AND BOREAL TERRESTRIAL ECOSYSTEMS FROM 1981-2010: COMPARISONS BETWEEN A GLOBAL EARTH SYSTEM MODEL AND OBSERVATIONS
T. Diehl*, A. Cescatti, G. Duveiller, R. Alkama

14:39-14:57 A06-O04 SURFACE ENERGY AND GREEN-HOUSE-GAS FLUX MEASUREMENTS AT A TUSSOCK TUNDRA SITE, COUNCIL, ALASKA
S. J. Park*, J. I. Yoo, N. Y. Chae, B. Y. Lee

14:57-15:15 A06-O05 A STOCHASTIC MODEL FOR THE POLYGONAL TUNDRA BASED ON POISSON-VORONOI DIAGRAMS

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April 29, 2015 (Wednesday), Conference Hall

15:45-17:00
Chair: Kazuyuki Saito

15:45-16:03 A06-O06 EFFECT OF N FERTILIZATION AND ROOT CUT TREATMENT ON SOIL RESPIRATION IN A LARIX GMELINII FOREST IN CENTRAL SIBERIA

16:03-16:21 A06-O07 ENVIRONMENTAL FACTORS REGULATING SOIL ORGANIC CARBON STORAGE IN PERMAFROST ECOSYSTEMS
K. Fujii*, Y. Matsuura, A. Osawa

16:21-16:39 A06-O08 PROCESSES IMPACTING ATMOSPHERE-SURFACE EXCHANGES AT ARCTIC TERRESTRIAL SITES
O. Persson*, A. Grachev, E. Konopleva, C. Cox, R. Stone, S. Crepinsek, M. Shupe, T. Uttal

16:39-16:57 A06-O09 CENTRAL YAKUTIA AS ONE OF KEY AREAS FOR STUDYING RAPID PERMAFROST CHANGES UNDER CURRENT CLIMATIC CONDITIONS
A. N. Fedorov*, P. Y. Konstantinov, R. V. Desyatkin, T. C. Maximov, Y. Iijima,
H. Park, G. Iwahana, T. Hiyma, M. Ulrich, F. Costard, A. Sejuorne, J. Skorve, L. Rouyet,
A. R. Desyatkin, N. I. Basharin

16:57-17:15 A06-O10 ENHANCEMENT OF HYDROCLIMATIC IMPACTS ON PERMAFROST ENVIRONMENT IN EASTERN SIBERIA
Y. Iijima*, H. Park, A. N. Fedorov

April 30, 2015 (Thursday), Conference Hall

10:45-11:45
Chair: Yojiro Matsuura

10:45-11:03 A06-O11 MEMORY EFFECTS FOR EXISTENCE OF SURFACE PERMAFROST IN EASTERN SIBERIA UNDER WARMING TREND
H. Sato*, G. Iwahana, T. Ohta

11:03-11:21 A06-O12 LONG-TERM VARIATION OF ANOMALY IN ABOVEGROUND BIOMASS IN CIRCUMPOLAR BOREAL FORESTS
A. Osawa*, Y. Haga, S. Fujii, N. Kurachi

11:21-11:39 A06-O13 DENDROCHRONOLOGICAL STUDIES OF THERMOKARST DEPRESSIONS DEVELOPMENT IN CENTRAL YAKUTIA (NOTRH-EASTERN RUSSIA)
A. Nikolaev*

11:39-11:57 A06-O14 IS TUNDRA PRODUCTIVITY RESPONSIVE TO CHANGES IN SEA ICE EXTENT IN THE ARCTIC?
M. Macias-Fauria*, B. C. Forbes

11:57-12:15 A06-O15 RECENT CHANGES IN TERRESTRIAL CO2 FLUXES IN SIBERIA INFERRED FROM MULTIPLE BOTTOM-UP ESTIMATIONS

April 30, 2015 (Thursday), Conference Hall

13:45-15:15
Chair: Tetsuya Hiyama

13:45-14:03 A06-O16 GRENE-TEA MODEL INTERCOMPARISON PROJECT (GTMIP) STAGE 1

14:03-14:21 A06-O17 PERMAFROST AND HYDROLOGICAL RESPONSE TO THE OBSERVED AND POTENTIAL CLIMATE CHANGE IN THE RUSSIAN ARCTIC DISCONTINUOUS PERMAFROST ZONE
L. Lebedeva*, N. Semenova, N. Tananaev

14:21-14:39 A06-O18 "EXAMINING THE CONTRIBUTION OF REPRODUCTIVE TRAITS TO ARCTIC SHRUB EXPANSION PATTERNS USING SPATIALLY-EXPLICIT SIMULATION MODELLING"
A. T. Naito*, D. M. Cairns, R. M. Feldman, W. E. Grant

14:39-14:57 A06-O19 FORWARD AND INVERSE MODELLING OF GREENHOUSE GASES IN THE ARCTIC AND SUBARCTIC REGIONS
D. Belikov*, M. Shamil, H. Takagi, A. Ganshin, R. Zhuravlev

14:57-15:15 A06-O20 TUNDRA BURNING IN 2007: DID SEA ICE RETREAT MATTER?
V. Alexeev*, E. Euskirchen, J. Cherry, R. Busey
April 29, 2015 (Wednesday), Room 201

10:45-12:15  B1: Arctic Climate Change and Potential Mid-latitude Weather Linkages: Large-scale Atmospheric Circulation and Storm Track Dynamics

Main Convener: James E. Overland
Chair: James E. Overland

B01-O01 DYNAMICS OF THE ARCTIC OSCILLATION AS A DOMINANT INTERNAL VARIABILITY AND A POSSIBLE LINK TO THE WARMING HIATUS
H. L. Tanaka*

B01-O02 IS THE JET STREAM BECOMING WAVIER IN RESPONSE TO RAPID ARCTIC WARMING?
J. Francis*, S. Vavrus

B01-O03 REGIONAL AND GLOBAL INTERACTIONS BETWEEN ARCTIC SEA ICE AND THE ATMOSPHERIC CIRCULATION
K. Dethloff*, D. Handorf, R. Jaiser, A. Rinke, B. Crasemann, W. Dorn

B01-O04 ARCTIC IMPACTS ON MID-LATITUDE WEATHER AND CLIMATE: THE RESEARCH CHALLENGE
J. E. Walsh*, T. Vilma

Discussion

April 29, 2015 (Wednesday), Room 201

13:45-15:15

Chair: TBD

B01-O06 A NEGATIVE PHASE SHIFT OF THE WINTER AO/NAO DUE TO THE RECENT ARCTIC SEA-ICE REDUCTION IN LATE AUTUMN

B01-O07 IMPACT OF SNOW COVER AND SEA ICE ON SUB-SEASONAL TO SEASONAL PREDICTIONS IN THE ARCTIC
Y. Orsolini*, R. Senan, G. Balsamo, A. Weisheimer, F. Vitart, F. D. Reyes

B01-O08 RECENT RAPID ARCTIC CHANGE AND ITS INFLUENCE ON EAST ASIA WEATHER
S. J. Kim*, B. M. Kim, S. H. Woo, J. H. Kim

B01-O09 SPATIAL-TEMPORAL PATTERNS OF THE COLD SURGE EVENTS IN CHINA IN RECENT 50 YEARS AND ITS RELATIONSHIP WITH ARCTIC SEA ICE
F. Huang*, C. Zhu

B01-O10 GREENLAND BLOCKING AS A MECHANISM FOR RECENT ARCTIC/MID-LATITUDE WEATHER LINKAGES
J. E. Overland*, E. Hanna

Discussion

April 29, 2015 (Wednesday), Room 201

15:45-17:15

Chair: Seong-Joong Kim

B01-O11 ROBUST ARCTIC SEA-ICE INFLUENCE ON THE FREQUENT EURASIAN COLD WINTERS IN PAST DECADES
M. Mori*, M. Watanabe, H. Shiogama, J. Inoue, M. Kimoto

B01-O12 THE EXTREME EUROPEAN COLD SPELL IN 2011/12 WINTER. PART I: ROLES OF ROSSBY WAVE TRAINS AND STORM TRACK FEEDBACK
L. Wang*, H. Nakamura, K. Nishii

B01-O13 POTENTIAL ARCTIC IMPACTS ON THE NORTH ATLANTIC JET STREAM
R. J. Hall*, E. Hanna

B01-O14 THE EFFECT OF DOWNWELLING LONGWAVE RADIATION ON ARCTIC SUMMER SEA ICE
M.-L. Kapsch*, R. G. Graversen, M. Tjernström, T. Economou, R. Bintanja

B01-O15 THE STRUCTURE AND DEVELOPMENT OF ARCTIC CYCLONES
T. Aizawa*, H. Tanaka

Discussion

April 27, 2015 (Monday), Room 203

14:00-15:30  B2: Current and Future Observing Strategies for Understanding the Evolving Arctic Climate and Ecological System

Main Convener: Gijs de Boer
Chair: Gijs de Boer, Leif Anderson

14:00-14:18 B02-O01 ENHANCING PROCESS UNDERSTANDING IN THE COUPLED ARCTIC ATMOSPHERE-OCEAN-ICE SYSTEM THROUGH MOSAIC
M. Shupe'
April 27, 2015 (Monday), Room 203

16:00-17:30  
Chair: Jacqueline Grebmeier, Gijs de Boer

16:00-16:18  B02-O06  INTERNATIONAL ARCTIC SYSTEMS FOR OBSERVING THE ATMOSPHERE (IASOA) – CREATING A COLLABORATION PLATFORM FOR PAN-ARCTIC RESEARCH  
S. Starkweather*, T. Uttal

16:18-16:36  B02-O07  TRACING ARCTIC HYDROLOGY WITH OBSERVATIONS OF WATER VAPOR ISOTOPES FROM IN SITU, AIRBORNE, AND SATELLITE PLATFORMS  
J. Cherry*

16:36-16:54  B02-O08  AN ATMOSPHERE FLAGSHIP PROGRAMME FOR NY-ÅLESUND, SVALBARD AND BEYOND  
R. Neuber*, C. A. Pedersen

16:54-17:12  B02-O09  SHIP-BASED ATMOSPHERIC AND SEA-STATE MEASUREMENTS TO SUPPORT THE PACIFIC ARCTIC GROUP (PAG) CLIMATE OBSERVING SYSTEM  

April 28, 2015 (Tuesday), Room 203

10:45-12:15  
Chair: Leif Anderson, Terry Callaghan

10:45-11:03  B02-O11  ARCTIC OCEAN BOUNDARY ARRAY: CORNERSTONE OF ARCTIC MONITORING  
S. Bacon*, T. Tsubouchi, Y. Aksenov

11:03-11:21  B02-O12  THE DISTRIBUTED BIOLOGICAL OBSERVATORY: A LATITUDINAL DETECTION ARRAY FOR TRACKING ECOSYSTEM CHANGE IN THE PACIFIC ARCTIC  
J. M. Grebmeier*, L. W. Cooper, K. E. Frey, T. Kikuchi, S. E. Moore, S. Vagle


11:39-11:57  B02-O14  YEAR-LONG, DAILY-SCALE ECOSYSTEM OBSERVATIONS UNDER PERENNIAL ICE COVER IN THE ARCTIC OCEAN  
S. Lamey*, J. Toole, R. Krishfield, M. L. Timmermans

11:57-12:15  B02-O15  SIZONET: MULTI-PURPOSE, MULTI-PLATFORM OBSERVATIONS TO INFORM RESPONSES TO AN ARCTIC SEA ICE COVER IN TRANSFORMATION  

April 28, 2015 (Tuesday), Room 203

13:45-15:15  
Chair: Terry Callaghan, Martin Raillard

13:45-14:03  B02-O16  A WORLD CLASS TERRESTRIAL RESEARCH INFRASTRUCTURE: BRINGING THE SCIENTIFIC COMMUNITY TOGETHER IN REMOTE, COLD REGIONS  
M. Johansson*, T. V. Callaghan

14:03-14:21  B02-O17  BUILDING A MULTI-DISCIPLINARY OBSERVATORY IN THE LOWER YENISEI REGION (IGARKA GEOCRYOLOGY LAB)  
N. Tananaev*, R. Teisserenc

(6)
April 29, 2015 (Wednesday), Room 202

11:00-12:15 B3: Changing permafrost and its impact on the physical, ecological, economic and cultural Earth system
Main Convener: Ylva Sjöberg
Chair: Ylva Sjöberg

11:00-11:15 B03-O01 THE LIMIT OF PASTORAL ADAPTATION TO PERMAFROST REGION UNDER GLOBAL WARMING: THE SAKHA PEOPLE IN THE MIDDLE BASIN OF LENA RIVER
H. Takakura*

11:15-11:30 B03-O02 TOWARDS SYSTEMATIC APPROACHES FOR INTERDISCIPLINARY GLOBAL CHANGE RESEARCH: THE ALAAS PERMAFROST SOCIO-ECOLOGICAL SYSTEM AS CASE IN POINT
S. Crate*

11:30-11:45 B03-O03 CLIMATE-INDUCED CHANGES IN STABILITY OF RUSSIAN URBAN INFRASTRUCTURE BUILT ON PERMAFROST
N. Shiklomanov*, D. Streletskiy

April 29, 2015 (Wednesday), Room 202

13:45-15:15 Chair: Hiroki Takakura

13:45-14:00 B03-O05 INITIAL CONCEPTUALIZATION AND APPLICATION OF ARCTIC TUNDRA LANDSCAPE EVOLUTION USING THE ALASKA THERMOKARST MODEL
W. R. Bolton, V. Romanovsky, A. D. McGuire, M. Lara, L. Hinzman*

14:00-14:15 B03-O06 PERMAFROST RESEARCH PRIORITIES: A ROADMAP FOR THE FUTURE OF PERMAFROST RESEARCH

14:15-14:30 B03-O07 THE INTERNATIONAL PERMAFROST ASSOCIATION: CURRENT INITIATIVES FOR CRYOSPHERIC RESEARCH

14:30-14:45 B03-O08 METADATA STATISTICS OF THE NEW GLOBAL TERRESTRIAL NETWORK FOR PERMAFROST DATABASE

14:45-15:15 Panel: Future challenges for the permafrost research community
H. Lantuit, M. Ishikawa, M. Johansson

April 29, 2015 (Wednesday), Room 202

15:45-17:15 Chair: Mamoru Ishikawa

15:45-16:00 B03-O09 LANDSLIDE ACTIVITY PEAK OF THE LATE 1980’S IN CENTRAL YAMAL PENINSULA, RUSSIA, OBSERVED FROM TIME SERIES SATELLITE IMAGERY
T. Kumpula, T. Mikhailov, M. Verdonen, B. Forbes*

16:00-16:15 B03-O10 TEMPERATURE, SNOW, PERMAFROST: HETEROGENEITY OF CHANGE IN SHRUB GROWTH ON THE ARCTIC TUNDRA
M. Hallinger*, K. Tape, M. Wilming

16:15-16:30 B03-O11 THERMOKARST LAKE SEDIMENT AS INDICATOR OF CLIMATE VARIATIONS: PRECISE ENVIRONMENTAL ARCHIVE OR WISHFUL THINKING?
M. Fritz*, J. Lenz, K. Gajewski, P. Frenzel, I. Unkel, H. Lantuit

16:30-16:45 B03-O12 DETECTION OF MICROORGANISMS IN ANCIENT ICE WEDGES IN THE CENTRAL YAKUTIA (RUSSIA)
K. Elina*, B. Anatoly, C. Maria, F. Svetlana, S. Natalia, G. Valeria

16:45-17:00 B03-O13 MODERN TALIK FORMATION ON IV TERRACE OF THE LENA RIVER, CENTRAL YAKUTIA
L. Gagarin*

17:00-17:15 B03-O14 PERMAFROST CARBON DEGRADATION AT THE LAND-OCEAN-INTERFACE
G. Tanski*, M. Fritz, H. Lantuit
### April 30, 2015 (Thursday), Room 201

#### 10:45-12:15 B4: Arctic snow cover changes and their consequences

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<td>10:45-11:00</td>
<td>ARCTIC SNOW COVER CHANGES AND THEIR CONSEQUENCES: DEVELOPING A ROAD MAP FOR RESEARCH AND LONG-TERM MONITORING</td>
<td>T. V. Callaghan*, M. Johansson</td>
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<td>11:00-11:15</td>
<td>CLOUD COVER Dictates SPRING SNOW COVER, BUT SURFACE TEMPERATURE CHANGE IS RELATED TO BOTH</td>
<td>S. N. Williamson, D. Hik*, J. Gamon</td>
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<td>11:30-11:45</td>
<td>IMPACTS OF CHANGING WINTER SNOW CONDITIONS FOR ARCTIC ECOSYSTEMS</td>
<td>S. Bokhorst</td>
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<tr>
<td>11:45-12:00</td>
<td>HIGH ARCTIC PLANT RESPONSES TO CHANGES IN SNOW COVER</td>
<td>E. J. Cooper</td>
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**Main Convener:** Terry V. Callaghan  
**Chair:** Teruo Aoki

12:00-12:15 Questions and discussion

### April 30, 2015 (Thursday), Room 201

#### 13:45-15:15

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<tr>
<td>13:45-14:00</td>
<td>EFFECTS OF CHANGING SNOW CONDITIONS ON REINDEER HUSBANDRY IN ARCTIC SWEDEN</td>
<td>G. Rosqvist*, N. Inga</td>
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<td>14:00-14:15</td>
<td>THERMAL AND HYDROLOGICAL CONTROLS OVER ORGANIC MATTER REDISTRIBUTION IN GLACIAL SNOW COVER</td>
<td>K. Koziol*, E. Brown, N. Rutter, H. Moggridge, A. Hodson</td>
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<td>14:15-14:30</td>
<td>CHEMISTRY OF SNOW COVER AND ACIDIC SNOWFALL DURING A SEASON WITH HIGH LEVEL AIR POLLUTION AT HANSBREEN GLACIER, SPITSBERGEN</td>
<td>K. Migala*</td>
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<td>14:30-14:45</td>
<td>SNOW COVER IN RUSSIAN ARCTIC CITIES DUE TO CLIMATE CHANGE</td>
<td>M. N. Ivanov*</td>
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<td>14:45-15:15</td>
<td>General discussion: building a road map for future research and monitoring</td>
<td>Moderated by M. Schneebeli</td>
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**Chair:** Margareta Johansson

### April 29, 2015 (Wednesday), Main Hall

#### 10:45-12:15 B5: Remote Sensing of the Arctic System SUB-THEME: Atmospheric Science

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<td>10:45-11:00</td>
<td>EXTREME FIRE WEATHER CONDITIONS FOR WILDLAND FIRES IN ALASKA</td>
<td>H. Hayasaka*</td>
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<td>11:00-11:15</td>
<td>USE OF SURFACE-BASED REMOTE SENSORS FOR UNDERSTANDING AEROSOL-CLOUD INTERACTIONS AT HIGH LATITUDES</td>
<td>G. de Boer*, M. Shupe, D. Turner, T. Garrett, C. Zhao</td>
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<td>11:15-11:30</td>
<td>EUMETSAT OSISAF IRRADIANCE PRODUCTS</td>
<td>O. Godoe*y</td>
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<td>12:00-12:15</td>
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**Main Convener:** Jessica Cherry  
**Chair:** Jessica Cherry

### April 29, 2015 (Wednesday), Main Hall

#### 13:45-15:15 SUB-THEME: Biology and Phenology

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<td>13:45-14:00</td>
<td>IN SITU AND SATELLITE OBSERVATIONS FOR ACCURATE DETECTION OF PLANT PHENOLOGY AND EXTENT OF SNOW COVER IN BOREAL FORESTS</td>
<td>S. Nagai*, K. Sugihara, S. Tei, H. Kobayashi, R. Suzuki</td>
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<td>14:00-14:15</td>
<td>RECENT TEMPORAL DYNAMICS OF ARCTIC TUNDRA VEGETATION WITHIN THE CONTEXT OF SPATIAL BIOMASS-TEMPERATURE RELATIONSHIPS</td>
<td>H. Epstein*, U. Bhatt, M. Raynolds, D. Walker, L. Reichle</td>
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14:15-14:30 B05-O09 MODIS-BASED MAPPING OF THE GROWING SEASON AND PLANT PRODUCTION IN RELATION TO CLIMATE ON SVALBARD FOR THE 2000-2014 PERIOD
S. R. Karlsen*, K. A. Hogda, B. Johansen, R. van der Wal

14:30-14:45 B05-O10 OCEAN SURFACE TEMPERATURE TREND AND ITS IMPACTS ON PHYTOPLANKTON BIOMASS IN THE ARCTIC AND SUBARCTIC REGIONS
E. Siswanto*

14:45-15:00 B05-O11 THE EXPERIENCE OF UAV’S USE FOR ECOSYSTEM MONITORING ON THE SOLOVETSKY ISLAND (WHITE SEA)
A. Medvedev*

15:00-15:15 B05-O12 MAPPING UNDERSTORY NORMALIZED DIFFERENCE VEGETATION INDEX (NDVIU) IN BOREAL FORESTS BY MODIS BRDF PRODUCTS
W. Yang*, H. Kobayashi, R. Suzuki, K. N. Nasahara

April 29, 2015 (Wednesday), Main Hall

15:45-17:15 SUB-THEME: Snow and Ice

Chair: Masahiro Hori

15:45-16:00 B05-O13 ESTIMATION OF THE ARCTIC SEA THICKNESS USING THE SATELLITE MICROWAVE RADIOMETER AMSR2
K. Tateyama*

16:00-16:15 B05-O14 RAPID REDUCTION OF ARCTIC SEA ICE AND ITS IMPACTS ON BROMINE, OZONE, AND MERCURY PROCESSES
S. V. Nghiem*

16:15-16:30 B05-O15 OPTIMIZATION OF FRACTIONAL SNOW COVER ALGORITHMS FOR OPTICAL REMOTE SENSING
I. Appel*

16:30-16:45 B05-O16 DETECTION OF MELT PONDS ON ARCTIC SEA ICE FROM TERRASAR-X DUAL-POLARIMETRIC DATA
H. Han*, M. Kim, S. Lee, M. Shin, E. Jang, J. Im, J. Kim, D. Kim

16:45-17:00 B05-O17 QUASI-DAILY PAN-ARCTIC SEA-ICE LEAD DETECTION FROM MODIS THERMAL INFRARED IMAGERY
S. Willmes, G. Heinemann*

17:00-17:15 B05-O18 HIGH ACCURACY SEA ICE VELOCITY DATA SETS FROM AMSR SERIES AND THEIR APPLICATIONS TO UNDERSTANDING/FORECASTING OF SEA ICE VARIATIONS
K. Shimada*

April 30, 2015 (Thursday), Main Hall

10:45-12:15 SUB-THEME: Hydrology and Permafrost

Chair: Wolfgang Schoener

10:45-11:00 B05-O19 VERTICAL MOVEMENTS OF FROST MOUNDS IN SUB-ARCTIC PERMAFROST REGIONS DETECTED USING GEODETIC SURVEY AND SATELLITE INTERFEROMETRY
I. Beck*, R. Ludwig, M. Bernier, T. Strozzi, J. Boike

11:00-11:15 B05-O20 THE VARIATION OF HIGH LATITUDE WATER BODIES ALONG ALASKA COASTAL AREA OVER DIFFERENT PERMAFROST TYPES
Z. Wang*, M. O. Roman, B. Tan, T. C. James

11:15-11:30 B05-O21 ICE AND SNOW REGIME OF EURASIAN WATER BODIES FROM SATELLITE AND IN SITU OBSERVATIONS
A. V. Kouraev*, E. A. Zakharova, M. A. Naumenko, M. N. Shimaraev, A. G. Kostianoy, A. Y. Suknev, F. Remy

11:30-11:45 B05-O22 COMBINING OPTICAL AND RADAR REMOTE SENSING DATA FOR THE STUDY OF ORGANIC TRANSPORT IN “THERMOKARST LAKE – CATCHMENT” SYSTEMS OF RUSSIAN ARCTIC
Y. Dvornikov*, M. Leibman, B. Heim, A. Bartsch, H. W. Hubberten

11:45-12:00 B05-O23

12:00-12:15 B05-O24

April 30, 2015 (Thursday), Main Hall


Chair: Jessica Cherry

13:45-14:00 B05-O25

14:00-14:15 B05-O26 POTENTIAL OF NEW SAR MISSIONS FOR MONITORING OF ARCTIC LANDSURFACE HYDROLOGY
A. Bartsch, M. Leibman, B. Widhalm, E. Hogstrom, A. M. Trofaier, J. Dvornikov*
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<td>14:30-14:45</td>
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<td>WILDFIRE MONITORING UTILIZING NEW SATELLITE SENSORS</td>
<td>K. Nakai</td>
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<td>14:45-15:00</td>
<td>B05-O29</td>
<td>SIOS REMOTE SENSING SERVICE</td>
<td>V. L. Barth*, B. Andersen, O. A. Misund, J. B. Orbaek, G. Macelloni</td>
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<td>B6: A Pan-Arctic Challenge: Predicting the Future of Marine Biota and Ecosystem Connectivity Through Field Studies and Data Integration</td>
<td>Main Convener: Dieter Piepenburg</td>
<td>Chair: Sung-Ho Kang</td>
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<td>14:00-14:15</td>
<td>B06-O01</td>
<td>SEA ICE ALGAE RESPONSE TO BEAUFORT GYRE VARIATION</td>
<td>E. Watanabe*, J. Onodera, N. Harada, M. N. Aita, A. Ishida, M. J. Kishi</td>
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<td>14:15-14:30</td>
<td>B06-O02</td>
<td>USE OF NEXT-GENERATION SEQUENCING IN STUDYING BIOGEOGRAPHY OF SEA-ICE PROTISTS</td>
<td>M. Majaneva*, J. M. Rintala, J. Blomster</td>
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<td>14:45-15:00</td>
<td>B06-O03</td>
<td>SPRINGTIME PHYTOPLANKTON DYNAMICS AT A MONITORING SITE IN THE KONGSFJORDEN (SPITSBERGEN)</td>
<td>A. G. J. Buma*, W. H van de Poll, R. J. W. Visser, P. Fischer, D. Maat</td>
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<td>15:00-15:15</td>
<td>B06-O05</td>
<td>SETTLING DIATOM FLUX REFLECTING HYDROPRAPHIC CHANGE IN THE WESTERN ARCTIC OCEAN, 2010-2012</td>
<td>J. Onodera*, E. Watanabe, N. Harada</td>
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<td>16:00-17:30</td>
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<td>MICRO-FOCUS X-RAY CT ANALYSIS REVEALS SHELL DENSITY OF MARINE CALCIFIERS AND ITS SEASONAL CHANGES</td>
<td>K. Kimoto*, O. Sasaki, H. Kano, T. Kihara, M. Wakita, J. Onodera, M. Honda, N. Harada</td>
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<td>16:15-16:30</td>
<td>B06-O08</td>
<td>THE ARCTIC OCEAN NUTRIENT BUDGET: TRANSPORT OF DISSOLVED INORGANIC AND ORGANIC NUTRIENTS ACROSS THE ARCTIC OCEAN BOUNDARIES</td>
<td>S. Torres-Valdés*, T. Tsubouchi, A. Naveira-Garabato, E. Davey, S. Bacon</td>
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<td>17:15-17:30</td>
<td>B06-O12</td>
<td>SHORT-TERM CHANGES OF MESOZOOPLANKTON COMMUNITY IN THE CHUKCHI SEA DURING AUTUMN</td>
<td>K. Matsuno*, N. Yokoi, A. Yamaguchi, S. Nishino, J. Inoue, T. Kikuchi</td>
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<td>ZOOPLANKTON COMMUNITIES ON ARCTIC SHELVES: A PANARCTIC ANALYSIS OF FAUNAL REGIONS</td>
<td>R. R. Hopcroft*, K. N. Kosobokova, E. Ershova, J. M. Questel, C. A. Smoot</td>
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<td>10:45-11:00</td>
<td>B06-O13</td>
<td>ZOOPLANKTON COMMUNITIES ON ARCTIC SHELVES: A PANARCTIC ANALYSIS OF FAUNAL REGIONS</td>
<td>R. R. Hopcroft*, K. N. Kosobokova, E. Ershova, J. M. Questel, C. A. Smoot</td>
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<td>11:00-11:15</td>
<td>B06-O14</td>
<td>DESTINATION NORTH – STRUCTURAL AND FUNCTIONAL DIVERSITY OF ZOOPLANKTON IN RELATION WITH ENVIRONMENTAL VARIABLES IN THE ENTRANCE TO THE ARCTIC OCEAN</td>
<td>M. Gluchowska*, E. Trudnowska, K. Blachowiak-Samolyk, I. Goszczko, W. Walczowski, S. Kwaszynowski</td>
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11:15-11:30  B06-O15  FROM ‘BENTHOS-DOMINATED’ TO ‘ZOOPLANKTON-DOMINATED’ MODE: IS IT PLAUSIBLE SCENARIO FOR ARCTIC FJORDS?
K. Grzelak*, M. Gluchowska, J. M. Weslawski

11:30-11:45  B06-O16  BENTHIC COMMUNITY DIVERSITY AND STRUCTURE IN RELATION TO SEDIMENT PROCESSES IN THE CHUKCHI SEA
L. W. Cooper*, J. M. Grebmeier

11:45-12:00  B06-O17  BENTHIC ECOSYSTEM FUNCTIONING AND COUPLING PROCESSES IN THE SHALLOW LAPTEV SEA: EVIDENCE FROM BENTHIC TURNOVER RATES, BENTHIC AND PELAGIC PATTERNS

12:00-12:15  B06-O18  BENTHIC POPULATION DYNAMICS AND DIVERSITY IN THE CHANGING SHELF ECOSYSTEMS OF THE BERING AND CHUKCHI SEAS
M. Kedra*, J. Grebmeier, L. Cooper

April 28, 2015 (Tuesday), Main Hall

13:45-15:15  Chair: Monika Kedra
13:45-14:00  B06-O19  SPATIO-TEMPORAL VARIATIONS OF BENTHIC ACTIVITIES IN TWO CONTRASTED HIGH ARCTIC FJORDS (KONGSFJORDEN AND RIJPFJORDEN, SVALBARD)
N. Morato*

14:00-14:15  B06-O20  BENTHIC BIOMASS SIZE SPECTRA - A TOOL TO IDENTIFY BIOTIC RESPONSE TO ENVIRONMENTAL CHANGE IN THE ARCTIC?
M. WlodarskaKowalczuk, B. Gorska

14:15-14:30  B06-O21  UPPER THERMAL LIMITS OF CARDIAC FUNCTION FOR ARCTIC COD BOREOGADUS SAIDA - A KEY FOOD WEB FISH SPECIES IN THE ARCTIC OCEAN
H. Drost*

14:30-14:45  B06-O22  SPATIAL ASSOCIATIONS BETWEEN BALEEN WHALES AND THEIR PREY IN THE NORTHERN BERENG AND CHUKCHI SEAS

14:45-15:00  B06-O23  COORDINATING AND INTEGRATING INTERNATIONAL STUDIES OF MARINE BIODIVERSITY AND ECOSYSTEM DYNAMICS IN THE ATLANTIC SECTOR OF THE ARCTIC OCEAN – A KEY ACTIVITY OF THE SVALBARD INTEGRATED EARTH OBSERVING SYSTEM

15:00-15:15  B06-O24  INTEGRATION OF THE BEAUFORT SEA SHELF ECOSYSTEM MODEL WITH BIOMARKER DATA TO SELECT INDICATORS FOR MONITORING
C. Hoover*, L. Loseto

April 28, 2015 (Tuesday), Room 204

10:45-12:15  B7: Atmosphere-ocean-ice interactions and aspects related to a future, seasonally ice free Arctic Ocean
Main Convener: Bert Rudels
Chair: Thomas Spengler, Thomas Haine

B07-O01  MULTI-DECADAL VARIABILITY IN THE ARCTIC
S. Outten*, I. Esau
B07-O02 THE COMPLEX RESPONSE OF ARCTIC AEROSOL TO SEA-ICE RETREAT  

B07-O03 ON ASSESSING THE TEMPORAL VARIABILITY OF ARCTIC ENERGY BUDGETS  
L. Haimberger*, M. Mayer, M. Blaschek

B07-O04 FUTURE CHANGES IN THE ARCTIC OCEAN BIOGEOCHEMISTRY IN CMIP5 PROJECTIONS WITH MPI-ESM  
T. Ilyina*, K. Six, J. Jungclaus

B07-O05 TOWARDS PROCESS RESOLVING MODELING, INTEGRATED SYNTHESIS AND PREDICTION OF ARCTIC CLIMATE CHANGE  
W. Maslowski*, A. Roberts, R. Osinski

April 28, 2015 (Tuesday), Room 204

13:45-15:15
Chair: Wataru Yanase, Andrey Proshutinsky

B07-O06 INVESTIGATING LEADS AND THE ATMOSPHERIC BOUNDARY LAYER NEAR SVALBARD  
G. Heinemann*

B07-O07 DIRECT OBSERVATIONS OF OCEAN VARIABILITY ACROSS THE ARCTIC MARGINAL ICE ZONE FROM AUTONOMOUS GLIDERS  
L. Rainville*, C. M. Lee, M. J. Perry

B07-O08 ATMOSPHERE-ICE-OCEAN INTERACTIONS DURING SUMMER MELT AND EARLY AUTUMN FREEZE-UP: OBSERVATIONS FROM THE ACSE FIELD PROGRAM  

B07-O09 RAPID SEA-ICE MELT DUE TO WARM AIR ADVECTION: OBSERVATIONS FROM THE ACSE FIELD PROGRAM  
M. Tjernstrom*

B07-O10 CLOUD RADIATIVE FORING IN AN ICE-FREE ARCTIC  
J. Ridley*

B07-O11 PROJECTED FUTURE DURATION OF THE SEA-ICE-FREE SEASON IN THE ALASKAN ARCTIC BY CMIP5 MODELS  
M. Wang*, J. E. Overland

April 28, 2015 (Tuesday), Room 204

15:45-17:15
Chair: Guenther Heinemann, Michael Tjernström

B07-O12 ENVIRONMENTAL CONDITIONS FOR POLAR LOWS IN THE NORDIC SEAS  
T. Spengler*, T. Annick, M. Clio

B07-O13 INFLUENCE OF SURFACE FLUXES ON POLAR LOW DEVELOPMENT: IDEALISED SIMULATIONS  
A. Terpstra*, L. Green, T. Spengler

B07-O14 CLIMATOLOGY OF POLAR LOWS OVER THE JAPAN SEA USING THE JRA-55 REANALYSIS  
W. Yanase*, H. Niino

B07-O15

B07-O16 LONG-TERM DYNAMICS OF THE NORTH WATER POLYNYA BY MEANS OF PASSIVE MICROWAVE AND THERMAL INFRARED IMAGERY  
A. Preusser*, G. Heinemann, S. Willmes, S. Paul

April 29, 2015 (Wednesday), Room 204

10:45-12:15
Chair: Agnieszka Beszczyńska-Möller, Bert Rudels, Benjamin Rabe

B07-O17 ON THE CIRCULATION AND MIXING OF ATLANTIC WATER IN THE ARCTIC OCEAN  
M. Spall*

B07-O18 ARCTIC OCEAN STABILITY, A BALANCE BETWEEN COOLING AND FREEZING, FRESHWATER INPUT AND SEA ICE MELT  
B. Rudels*

B07-O19 ARCTIC OCEAN CIRCULATION CHANGES IN THE LAST DECADE, DERIVED FROM OBSERVATIONS AND MODEL INVESTIGATIONS  
M. Karcher*, H. Sumata, B. Rabe, T. Kikuchi, F. Kauker, R. Gerdes

B07-O20 THE ATLANTIC WATER IMPACT ON THE SHELF-BASIN EXCHANGE AT THE BOUNDARY BETWEEN THE BARENTS SEA AND THE GREENLAND SEA.  
I. Goszczko*

B07-O21 TIDES STIR UP ATLANTIC WATER HEAT ALONG THE ARCTIC OCEAN CONTINENTAL SLOPE  
Y.D. Lenn, TP. Rippeth, B. Lincoln, S. Bacon*, A. Sundfjord
April 29, 2015 (Wednesday), Room 204

13:45-15:15

Chair: Michael Spall, Craig Lee

B07-O22 UPPPER ARCTIC OCEAN DECADAL CHANGES: FRESHWATER, STRATIFICATION AND SURFACE VELOCITY
B. Rabe*

B07-O23 SEASONALITY AND TRENDS OF FRESHWATER EXCHANGES BETWEEN THE ICE AND OCEAN IN THE CANADA BASIN

B07-O24 MECHANISMS OF POLAR SURFACE WATER AND THEIR PROSPECTS WITH LOSS OF SUMMER ICE COVER
T. Haine*, K. Stewart

B07-O25 VOLUME, HEAT AND FRESHWATER FLUXES OF PACIFIC WATER THROUGH THE BARROW CANYON IN THE ARCTIC OCEAN
M. Itoh*, T. Kikuchi, S. Nishino

B07-O26 EXISTENCE OF THE MENDELEEV GYRE AND ITS ROLE IN ARCTIC CIRCULATION
J. Zhao*, T. Kim, S.-H. Kang

April 29, 2015 (Wednesday), Room 204

15:45-17:15

Chair: Bert Rudels, Wieslaw Maslowski

B07-O27 ROLES OF DIFFERENT FACTORS IN SHAPING ARCTIC OCEAN HYDROGRAPHY AND CIRCULATION
A. Proshutinsky*, M.-L. Timmermans, E. Watanabe, J. Yang, R. Krishfield, J. Toole,
E. Golubeva, G. Platov, C. Herbaut, M.-N. Houssais, J. Zhang, B. Williams

B07-O28 MIXING, OVERTURNING AND WATER MASS TRANSFORMATION IN THE ARCTIC OCEAN
A. Naveira Garabato, R. DeGiorgio, J. Zika, S. Bacon*

B07-O29 FUTURE STATES OF THE ARCTIC OCEAN USING A COUPLED ICE-OCEAN MODEL WITH PROBABILITY DISTRIBUTION FUNCTION
M. Ikeda*

B07-O30 TWO DECADES OF THE ATLANTIC WATER VARIABILITY IN FRAM STRAIT AND ITS LINKS TO THE REGIONAL SEA ICE AND ATMOSPHERIC CHANGES
A. B. Moeller*, W. Walczowski, U. Schauer

B07-O31 OBSERVED SEASONAL VARIATION OF THE ARCTIC OCEAN HEAT AND FRESH WATER BUDGETS
T. Tsubouchi*, S. Bacon, A. N. Garabato

B07-O32 AUTONOMOUS INVESTIGATIONS OF MARGINAL ICE ZONE PROCESSES- CHANGING FEEDBACKS AND OBSERVATIONAL CHALLENGES

April 30, 2015 (Thursday), Room 202

10:45-12:15

B8: From human security to geopolitical dynamics in the Global Arctic: the global implications of rapid environmental, economic, and societal change

Main Convener: Lassi Heininen

Chair: Gunhild Hoogensen Gjörv, Lassi Heininen, Aki Tonami

B08-O01 THE IMPACT OF CLIMATE CHANGE ON ABORIGINAL SUBSISTENCE WHALING IN NORTHWEST ALASKA: INUPIAT WHALERS, BOWHEAD WHALES AND OIL/GAS DEVELOPMENT
N. Kishigami*

B08-O02 HUMAN SECURITY AS ARCTIC GEOGRAPHIES OF PROVISIONING
A. Mason*

B08-O03 THE PROJECT "RED CHUM" AS A FORM OF INTERACTION BETWEEN THE INDIGENOUS PEOPLES OF THE ARCTIC AND THE OIL COMPANIES
N. S. Bushiyeva*, G. N. Degtaya

B08-O04 EXTRACTIVE RESOURCES AND SUSTAINABLE DEVELOPMENT IN THE ARCTIC: RESEARCH PRIORITIES FOR THE NEXT DECADE
C. Southcott*

Open discussion
April 30, 2015 (Thursday), Room 202

Chair: Gunhild Hoogensen Gjörv, Lassi Heininen, Aki Tonami

B08-O05 NORTHERN TRADE ROUTE
S. Bensassi*, I. M. Zarzoso, J. Stroeve

B08-O06 THE ARCTIC NARRATIVE IN THE ICELANDIC MEDIA: DO ECONOMIC INTERESTS TRUMP ENVIRONMENTAL CONCERNS?
K. Schram*, J. G. Olafsson

B08-O07 MECHANISMS FOR COPING WITH ADVERSE STATES AND THE PERSONALITY CHANGES OF WORKERS IN A CHANGING ARCTIC CLIMATE
Y. Korneeva*, N. Simonova

B08-O08 UNDERSTANDING RAPID ENVIRONMENTAL, ECONOMIC, AND SOCIETAL CHANGE: ADAPTATION ACTIONS FOR A CHANGING ARCTIC – BERING CHUKCHI BEAUFORT REGION

Open discussion

April 28, 2015 (Tuesday), Conference Hall

B9: Arctic Governance, Sustainable Development of Local Communities and Non-Arctic State’s Contribution

Chair: Shinichiro Tabata, Elena Conde, Rasmus Bertelsen

Main Convener: Shinichiro Tabata

10:45-12:15

B09-O01 CHINESE ARCTIC SCIENCE DIPLOMACY: CONCEPTUALIZING THE CHINESE DREAM, A HISTORICAL APPROACH FROM HARD POWER TO SOFT POWER
R. G. Bertelsen*, X. Li, M. H. Gregersen

B09-O02 WHAT JAPAN CAN DO AS AN ASIAN PERMANENT OBSERVER STATE IN THE ARCTIC COUNCIL’S FRAMEWORK
T. Ikeshima*

B09-O03 FROM ENVIRONMENTAL PROBLEMS TO SOCIETAL OPPORTUNITIES: HOW CLIMATE CHANGE AND SUSTAINABILITY DISCOURSE IS RESHAPING THE ARCTIC MAKING IT MORE ATTRACTIVE FOR NON-ARCTIC POWERS ESPECIALLY IN EAST ASIAN COUNTRIES AND MAKING IT MORE VULNERABLE FOR INDIGENOUS PEOPLES IN THE ARCTIC
U. Jakobsen*

B09-O04 CHINA’S ROLE IN ARCTIC GOVERNANCE: MAPPING CHINESE FOREIGN POLICY CONTRADICTIONS
C. Pelaudeix*

B09-O05 THE POLITICS OF THE RIGHT TO SELF-DETERMINATION: GREENLAND IN TRANSITION
M. Takahashi*

B09-O06 AUTONOMISM AND COMPREHENSIVE SUSTAINABILITY IN GREENLAND AND NUNAVUT
R. C. Thomsen*

13:45-15:15

Chair: Shinichiro Tabata, Elena Conde, Rasmus Bertelsen

B09-O07 A PRELIMINARY ANALYSIS OF THE SOCIO-ECONOMIC DEVELOPMENT OF ARKHANGIELSK AND MURMANSK REGIONS AFTER THE COLLAPSE OF THE USSR
S. Tabata*, T. Tabata

B09-O08 POPULATION DYNAMICS AND TRANSFORMATION OF HUMAN SETTLEMENTS IN NORTHEAST ARCTIC REGIONS OF RUSSIA
T. Litvinenko*

B09-O09 UNDERSTANDING THE VALUES OF SUSTAINABLE DEVELOPMENT IN THE ARCTIC: A CASE STUDY OF SUSTAINABLE DEVELOPMENT IN ICELAND
K. H. Janelle*, G. A. M. S

B09-O10 ENTREPRENEURIAL SUPPORT AND LOCAL COMMUNITY AROUND THE RESOURCE DEVELOPMENT IN ARCTIC RUSSIA
M. Goto*

B09-O11 PROBLEMS OF CONGRUENCE OF INTERESTS AND PERSPECTIVES OF NORTHERN INDIGENOUS ETHNIC MINORITIES AND OIL & GAZ CORPORATIONS COEXISTENCE IN THE COASTAL AREAS OF THE RUSSIAN FEDERATION ARCTIC ZONE
S. Kutsenko*, A. Podoplekin
THE KETS ETHNOS AND ITS “FEEDING LANDSCAPE”: ECOLOGICAL-GEOGRAHICAL AND SOCIO-ECOLOGICAL PROBLEMS UNDER GLOBALIZATION AND CHANGING CLIMATE
A. A. Medvedkov

April 28, 2015 (Tuesday), Conference Hall

15:45-17:15
Chair: Shinichiro Tabata, Elena Conde, Rasmus Bertelsen

15:45-16:00 B09-O13 DESIGNING A REGIONAL SEAS PROGRAM FOR THE ARCTIC OCEAN: LEGAL, SCIENTIFIC AND OBSERVATIONAL SUPPORT
B. Baker*

16:00-16:15 B09-O14 NEW CHALLENGES FOR ARCTIC REGIONAL ORDER
F. Ohnishi*

16:15-16:30 B09-O15 ARCTIC GOVERNANCE AND INDIGENOUS PEOPLES: A HUMAN SECURITY PERSPECTIVE
K. Hossain*

16:30-16:45 B09-O16 THE UK’S, GERMAN AND FRENCH APPROACHES TO THE ARCTIC
M. Smieszek*, P. Kankaanpaa

16:45-17:00 B09-O17 ARCTIC COUNCIL’S IMPACT ON MEMBER STATES POLICIES: DOES IT REALLY MATTER? ARCTIC COUNCIL AND NORWEGIAN SHIPPING POLICY
P. Graczyk*

17:00-17:15 B09-O18 THINKING OUTSIDE THE BOX: A CALL FOR THE POLAR TREATY
A. Asón
April 29, 2015 (Wednesday), Room 203

13:45-15:15  Subtitle: Arctic glaciers  
Chair: Nozomu Takeuchi

13:45-14:00  B10-O13  MASS BALANCE AND DYNAMICS OF AUSTFONNA ICE CAP, SVALBARD  
J. O. Hagen*, T. Dunse, T. Eiken, J. Kohler, G. Moholdt, T. V. Schuler, T. Ostby

14:00-14:15  B10-O14  MASS BALANCE ESTIMATION FOR THE HURLBUT ICE CAP IN NORTHERN GREENLAND,  
K. Konya*

14:15-14:30  B10-O15  MODELLING MASS BALANCE AND DYNAMICS OF HARDANGERJØKULEN ICE CAP,  
SOUTHERN NORWAY  
H. Akesson, K. H. Nisancioglu*, R. H. Giesen, M. Morlighem

14:30-14:45  B10-O16  SHRINKING GLACIERS IN SUNTAR KHAYATA, EAST SIBERIA  
T. Kadota*, T. Shirakawa, R. Kusaka, S. Takahashi, A. Galanin, A. Fedorov, H. Enomoto,  
T. Ohata, H. Yabuki

14:45-15:00  B10-O17  MODELING FUTURE MASS BALANCE OF THE ARCTIC GLACIERS: CASE STUDY IN THE  
ALTAI MOUNTAINS  
Y. Zhang*, H. Enomoto, T. Ohata

15:00-15:15  B10-O18  APPEARANCE OF NEW ARCTIC ISLANDS DUE TO RECESSION OF GLACIERS  
W. Ziaja*, K. Ostafin

April 29, 2015 (Wednesday), Room 203

15:45-17:15  Subtitle: Snow/ice impurities and surface energy balance  
Chair: Teruo Aoki

15:45-16:00  B10-O19  LIGHT ABSORBING SNOW IMPURITIES MEASURED AT SIGMA-A, GREENLAND ICE  
SHEET AND THEIR EFFECT ON ALBEDO  
T. Aoki*, S. Matoba, S. Yamaguchi, T. Tanikawa, M. Niwano, K. Kuchiki, M. Hori,  
H. Motoyama, K. G. Azuma, Y. Ogawa, Y. Kondo, N. Moteki

16:00-16:15  B10-O20  DARKENING GREENLAND AND CRYOCONITE HOLE DYNAMICS  
N. Takeuchi*, R. Sakaki, T. Aoki, M. Niwano, Y. Onuma, S. Tanaka, R. Shimada, N. Nagatsuka,  
J. Uetake

16:15-16:30  B10-O21  FORMING PROCESS OF CRYOCONITE GRANULES ON QAANAAQ GLACIER,  
NORTHWESTERN GREENLAND  

16:30-16:45  B10-O22  SNOW ALGAL COMMUNITIES AND ITS EFFECT ON MELTING OF GLACIERS IN SUNTAR  
KHAYATA MOUNTAIN RANGE IN EASTERN SIBERIA  
S. Tanaka*, N. Takeuchi, Y. Fujisawa, M. Miyairi, T. Kadota, T. Shirakawa, R. Kusaka,  
S. Takahashi, H. Enomoto, T. Ohata, H. Yabuki, K. Konya, A. Fedorov, P. Konstantinov

16:45-17:00  B10-O23  SCANNING ELECTRON MICROSCOPY (SEM) ANALYSIS OF BLACK CARBON IN ARCTIC  
SNOW  
K. Kuchiki, M. Hirabayashi

17:00-17:15  B10-O24  SURFACE ENERGY BALANCE AT THE SITE SIGMA-A, NORTHWEST GREENLAND DURING  
THE RECORD SURFACE MELT EVENT IN THE SUMMER OF 2012  
M. Niwano*, T. Aoki, S. Matoba, S. Yamaguchi, T. Tanikawa, K. Kuchiki, H. Motoyama

April 29, 2015 (Wednesday), Room 205

Main Convener: Atsumu Ohmura  
Chair: Atsumu Ohmura

10:45-11:15  B11-O01  CHANGES IN ARCTIC SEA ICE CHARACTERISTICS AND THEIR IMPACT ON NAVIGATION  
P. Wadhams*

11:15-11:45  B11-O02  RESEARCH ON NAVIGATION SUPPORT SYSTEM FOR THE ARCTIC SEA ROUTES  
H. Yamaguchi*

11:45-12:15  B11-O03  STRATEGIC OVERVIEW OF IMPLEMENTING THE ARCTIC MARINE SHIPPING  
ASSESSMENT RECOMMENDATIONS AND THE IMO MANDATORY POLAR CODE  
L. W. Brigham*

April 29, 2015 (Wednesday), Room 205

13:45-15:15  Chair: Henry Huntington

13:45-14:00  B11-O04  THE NAUTICAL INSTITUTE’S WAY AHEAD IS ICE NAVIGATION TRAINING ASSURANCE  
D. Snider*

14:00-14:15  B11-O05  MARITIME USER REQUIREMENTS AT HIGH LATITUDES - FIRST RESULTS FROM THE  
MARENOR PROJECT  
R. Behlke
14:15-14:30  B11-O06  FISHERIES AND THE NEWLY ACCESSIBLE ARCTIC OCEAN  
H. P. Huntington*

14:30-15:00  B11-O07  THE NEW ARCTIC OCEAN: IMPLICATIONS FOR RESEARCH AND POLICY  
P. Wassmann*

15:00-15:15  B11-O08  FISHING INDUSTRY IN NUNAVUT: POLICY AND MANAGEMENT  
M. Pan*

April 29, 2015 (Wednesday), Room 205

15:45-17:15  Chair: Kevin Hedges

15:45-16:00  B11-O09  SVALBARD ZONE LANDINGS SHOWS FISHERIES MOVING NORTH WHEN WATERS HEATH  
O. A. Misund*, K. Heggland, H. Gjøesæter, O. J. Loenne

16:00-16:15  B11-O10  MARINE INVASIVE SPECIES CHALLENGES IN THE ARCTIC  
B. A. Kaiser*, L. Fernandez, J. Sundet

16:15-16:35  B11-O11  THE NEW ARCTIC: THE ROLE OF SCIENCE IN CONSERVATION AND MANAGEMENT OF FISHERIES IN AN EMERGING OCEAN  
D. Benton*

16:35-16:55  B11-O12  NETWORKS AND GOVERNANCE OF ARCTIC SHIPPING AND FISHING: A ROBUST MANAGEMENT APPROACH  
R. Pincus*

A. Ohmura*

April 27, 2015 (Monday), Room 204

14:00-15:30  C1: Sharing Arctic data, observations and knowledge: understanding the global system through international exchange  
Main Convener: Peter L. Pulsifer

C01-O01  THE EVOLUTION OF NSF ARCTIC DATA MANAGEMENT: CHALLENGES AND LESSONS LEARNED AFTER TWO DECADES OF SUPPORT  
J. A. Moore*, S. F. Williams

C01-O02  DEVELOPMENT OF ARCTIC DATA ARCHIVE SYSTEM (ADS)  
H. Yabuki*, T. Sugimura, T. Terui

C01-O03  DATA MANAGEMENT WITHIN THE SVALBARD INTEGRATED ARCTIC OBSERVING SYSTEM  
O. Godoy*, S. Tronstad, V. Vitale, I. Schewe, B. L. Bye, T. Hamre, J. B. Oerbaek

C01-O04  NORDIC RESEARCH PROGRAMME ON INTERACTION BETWEEN CLIMATE CHANGE AND CRYOSPHERE – AN EXAMPLE OF SUCCESSFUL SHARING OF RESOURCES  

C01-O05  ARCTICCONNECT: A PLATFORM FOR KNOWLEDGE SHARING AND COLLABORATION  
S. Vossepoel*

C01-O06  ESTABLISHING AN ARCTIC DATA NETWORK THROUGH INTERNATIONAL COLLABORATION  
P. L. Pulsifer*, V. Rachold, J. R. Larsen, O. Godoy, J. Friddell, H. Lappalainen, Y. Qiu

C01-O07  THE ARCTIC OBSERVING SUMMIT: AN ACTIVITY OF THE INTERNATIONAL STUDY OF ARCTIC CHANGE AND A SAON TASK  
M. S. Murray*

C01-O08  THE GLOBAL TERRESTRIAL NETWORK FOR PERMAFROST (GTN-P) DATA MANAGEMENT SYSTEM WITHIN THE FRAMEWORK OF THE ARCTIC DATA INTERFACE (ADI)  

April 27, 2015 (Monday), Room 204

16:00-17:30

C01-O09  DEVELOPMENT OF THE VESSEL NAVIGATION SUPPORT SYSTEM FOR SEA ICE AREA  

C01-O10  NASA'S ARCTIC BOREAL VULNERABILITY EXPERIMENT: ACCELERATING SCIENCE WITH BIG DATA CLOUD TECHNOLOGIES AND LIFECYCLE DATA MANAGEMENT  
P. Griffith*, D. Duffy, E. Hoy, S. Ambrose, M. McInerny

C01-O11  DEVELOPMENT OF ONLINE VISUALIZATION TOOL "VISION"  
T. Sugimura*, T. Terui, H. Yabuki
C01-O12   POLAR AND ALPINE MICROBIAL COLLECTION (PAMC): A CULTURE COLLECTION DEDICATED TO POLAR AND ALPINE MICROORGANISMS
   Y. M. Lee*

C01-O13   BARENTS SEA BENTHIC FAUNA IN A CHANGING SEA
   L. L. Jorgensen*, P. Plubin

C01-O14   THE IMPORTANCE OF TRADITIONAL KNOWLEDGE RECOGNITION AND INVOLVEMENT INTO THE SCIENTIFIC RESEARCH.
   J. Staffansson*

C01-O15   LEGAL BACKGROUND IN THE INTERNATIONAL LAW CONCERNING INDIGENOUS INTELLECTUAL PROPERTY IN THE ARCTIC
   L. I. Nikanorova*

C01-O16   THE TRANSFER OF ARCTIC-BASED RESEARCH AND SCIENCE COMMUNICATION METHODS TO TROPICAL CONTEXTS
   R. Fielding*

April 30, 2015 (Thursday), Room 203

10:45-12:15   C2: Arctic in Rapid Transition - future research directions from the perspective of early career scientists
   Main Convener: Makoto Sampei

10:45-10:50   Opening remarks
   M. Sampei

10:50-11:05   C02-O01 UNDERSTANDING MECHANISMS CONTROLLING THE ARCTIC ENVIRONMENT IN THE LAPTEV SEA – IMPLICATIONS FROM ND ISOTOPE AND RARE EARTH ELEMENTS
   G. Laukert*, M. Frank, E. Hathorne, C. Wegner, H. Kassens

11:05-11:20   C02-O02 VARIABLE PATHWAY OF THE PACIFIC WATER IN THE PACIFIC SECTOR OF THE ARCTIC OCEAN
   K. Mizobata*

11:20-11:35   C02-O03 CONTRASTING OPTICAL PROPERTIES OF SURFACE WATERS ACROSS THE FRAM STRAIT AND ITS POTENTIAL BIOLOGICAL IMPLICATIONS
   A. K. Pavlov*, M. A. Granskog, C. A. Stedmon, B. V. Ivanov, S. R. Hudson, S. Falk-Petersen

11:35-11:50   C02-O04 EXAMINING THE POTENTIAL CONSEQUENCES OF CLIMATE-INDUCED PREY SHIFTS ON BELUGA WHALES IN THE BEAUFORT SEA
   E. S. Choy*, L. L. Loseto, J. D. Roth

11:50-12:15   Discussion

April 30, 2015 (Thursday), Room 203

13:45-15:15   C02-O05 WHERE ARE THEY NOW? A CASE STUDY OF INTERNATIONAL TRAVEL SUPPORT FOR EARLY CAREER RESEARCHERS
   S. Majaneva*, J. Baeseman, G. Fugmann, M. Lisowska, L. Christie

14:00-14:20   C02-O06 THE FUTURE OF PERMAFROST RESEARCH; CONTRIBUTIONS OF EARLY CAREER RESEARCHERS FROM THE EUROPEAN CONFERENCE ON PERMAFROST TO ICARPIII
   Y. Sjoberg*, F. Bouchard, A. Cassidy, B. Desphande, M. Fritz, E. Hogtrom, J. Lepage,
   A. Morgenstern, A. Nieuwendam, M. Oliva, M. Paquette, A. Rudy, M. Siewert, S. Weege

14:20-14:40   C02-O07 ARCTIC IN RAPID TRANSITION: INTEGRATING SPATIAL AND TEMPORAL SCALES IN THE CHANGING ARCTIC SYSTEM: TOWARDS FUTURE RESEARCH PRIORITIES
   N. Morata, S. Majaneva*, H. Findlay, M. Fritz, M. Kedra, A. Nikolopoulos, M. Oregan,
   A. Pavlov, I. Peeken, M. Sampei, K. Werner, C. Wegner

14:40-15:15   Discussion on ART network suggestion for ICARP III

April 28, 2015 (Tuesday), Room 205

10:45-12:15   C3: Emerging questions in Arctic Geoscience
   Main Convener: Victoria Pease
   Chair: Victoria Pease, Bernard Coakley

   C03-O01 A SOCIALLY RELEVANT ARCTIC TECTONIC PUZZLE
   V. Pease*

   C03-O02 THE EUREKAN DEFORMATION IN THE ARCTIC – AN OUTLINE
   K. Piepjohn*

   C03-O03 THE GREAT CHALLENGES IN ARCTIC OCEAN PALEOCEANOGRAPHY AND SCIENTIFIC DRILLING
   R. Stein*
C03-O04 NEW DATA SUPPORT NEW HYPOTHESES ABOUT ARCTIC OCEAN TECTONICS; PLANNING EXPEDITIONS FOR THE NEXT DECADE.
B. Coakley

C03-O05 SEISMICITY, STRUCTURE AND TECTONICS IN THE ARCTIC REGION
M. Kanao*, V. Suvorov, S. Toda, G. Toyokuni, S. Tsuboi

C03-O06 CULTURE AND ARCTIC CLIMATE CHANGE: INTEGRATING LONG-TERM PERSPECTIVES FROM ARCHAEOLOGY AND THE ENVIRONMENTAL SCIENCES
P. D. Jordan*, M. T. Friesen, M. L. Timmermans

April 28, 2015 (Tuesday), Room 205

13:45-15:15 C4: Co-design, co-production, co-communication of scientific knowledge? how to frame concerted research for sustainable development in times of change
Main Convener: Jörn Schmidt
Chair: Peter Sköld

C04-O01 SCIENCE PLAN 11 AND INCLUDING ARCTIC COMMUNITIES IN RESEARCH: WHAT HAS BEEN DONE SINCE ICARP II?
C. Southcott*

C04-O02 THE SALIENCE OF THE ADAPTATION ISSUE IN AN ARCTIC COASTAL COMMUNITY
H. Dannevig*, G. K. Hovelsrud

C04-O03 REINDEER HERDERS WITHOUT REINDEERS: THE THEORY AND PRACTICE OR ECOSYSTEM-BASED APPROACH IN THE RUSSIAN ARCTIC
A. Pristupa*, M. Tysiachniouk

C04-O04 LEADERS AT THE POLES: WHAT POLAR RESEARCHERS CAN LEARN FROM MANAGERS AND WHAT CAN THEY TEACH THEM?
B. Lisowski*, M. Lisowska

C04-O05 GAMES IN ENVIRONMENTAL EDUCATION, COMMUNICATION AND SCIENCE
J. Schmidt*, D. Nissen, M. Magens, R. Voss

C04-O06 TRADITIONAL KNOWLEDGE AND (WESTERN) SCIENCE
C. C. Olsen*

Summery comment on session

April 30, 2015 (Thursday), Room 204

10:45-12:15 C5: Advances in Transdisciplinary Arctic Research: Progress on Building Collaborative Agendas for Research Supporting Solutions for Sustainability
Main Convener: Carolina Cavazos Guerra

C05-O01 REINDEER HERDING AND NORTHERN ECOSYSTEMS UNDER WARMING CLIMATE

C05-O02 SUSTAINABILITY OF HUMAN-WILDLIFE SYSTEMS IN NORTHERN URBANIZING REGIONS
K. A. Jochum*

C05-O03 FINDINGS FROM THE CANADIAN POLAR COMMISSION'S REPORT ON THE STATE OF NORTHERN KNOWLEDGE IN CANADA
S. File*

C05-O04 ENGAGEMENT, CREATIVE DESIGN AND COLLABORATIVE STRATEGIES: LESSONS FOR A RESILIENT ARCTIC
G. Ibarguchi*, M. S. Murray

C05-O05 MINE CLOSURE, LOCAL WELL-BEING AND CARIBOU LIVELIHOODS: WHAT PATHWAYS TO SOCIO-ECOLOGICAL RESILIENCE IN MINE-IMPACTED INUIT COMMUNITIES?
S. Blangy*, A. Rixen

Discussion

April 30, 2015 (Thursday), Room 204

13:45-15:15

Debate panel on C5: Advances in Transdisciplinary Arctic Research: Progress on Building Collaborative Agendas for Research Supporting Solutions for Sustainability
Participants: Trevor Bell, Volker Rachold, Tatiana Vlasoba, Gunn-Britt Retter
April 27, 2015 (Monday), Conference Hall

14:00-15:30 C6: Understanding Sustainability in the Arctic: From Patchwork to Framework
Main Convener: Andrey N. Petrov
Chair: Peter Schweitzer

14:00-14:10
Introduction: IASC SHWG, ICARP III Process and White Paper in Arctic Sustainability Research
P. Schweitzer

14:10-14:30 C06-O01 ARCTIC SUSTAINABILITY SCIENCE: AGENDA 2020
A. N. Petrov*, F. Gail, S. Peter

14:30-14:50
Discussion

14:50-15:10 C06-O02 LAW AND SUSTAINABILITY IN THE ARCTIC
N. Loukacheva*

15:10-15:30 C06-O03 INTERNATIONAL GEOGRAPHICAL UNION COLD REGION ENVIRONMENTS COMMISSION: ROLE IN THE ARCTIC SUSTAINABILITY SCIENCE
T. Vlasova*

April 27, 2015 (Monday), Conference Hall

16:00-17:30
Chair: Gail Fondahl

16:00-16:20 C06-O04 RAPID ARCTIC TRANSITIONS DUE TO INFRASTRUCTURE AND CLIMATE (RATIC):
A COMPARISON OF CHANGES IN THE PRUDHOE BAY OILFIELD, ALASKA AND THE
BOVANENKOVO GASFIELD, RUSSIA
D. S. Walker*

16:20-16:40 C06-O05 ADOPTING A FRAMEWORK TO MAKE SENSE OF PATCHWORK: THE EXAMPLE OF
URBAN ECOLOGY
J. Graybill*

16:40-17:00 C06-O06 SINGLE-INDUSTRY CITIES AND SETTLEMENTS OF MURMANSK REGION: CHALLENGES
AND WAYS FORWARD
Y. Zaika*, E. Golubeva

17:00-17:20 C06-O07 LEAVE OR STAY: SETTLEMENT OF ANCESTORS UNDER NATURAL DISASTERS IN
YAKUTIA
V. V. Filippova*

17:20-17:30
Questions and Answers

April 28, 2015 (Tuesday), Room 201

10:45-12:15 C7: The Arctic system; changes and effects with emphasis on freshwater ecosystems
Main Convener: Alexander M. Milner
Chair: Jon Olafsson

C07-O01 ARCTIC COASTAL TRANSIT AND CYCLIC AQUATIC SYSTEMS’ HYDROLOGICAL AND
GEOCHEMICAL PARTICULARITIES
I. V. Fedorova*, A. A. Chetverova, I. E. Sidorina, O. N. Bobrova, B. Heim, Y. A. Dvornikov,
T. V. Skorospekhova, A. Morgenstern, N. K. Shumskaya, A. A. Shadrina

C07-O02 FRESHWATER PATHWAYS IN THE SUB-ARCTIC SEAS FROM THE GREENLAND
FRESHWATER EXPERIMENT
D. S. Dukhovskoy*, M. Bourassa, A. Proshutinsky

C07-O03 FRESH WATER AND ITS ROLE IN THE ARCTIC MARINE SYSTEM: SOURCES, DELIVERY,
DISPOSITION, STORAGE, EXPORT, AND PHYSICAL AND BIOGEOCHEMICAL
CONSEQUENCES IN THE ARCTIC AND GLOBAL OCEANS
E. Carmack, M. Yamamoto-Kawai*, S. Bacon, B. Bluhm, T. Haine, C. Lique, H. Melling,
I. Polyakov, F. Straneo, M. L. Timmermans, W. Williams

C07-O04 THE ARCTIC ATMOSPHERIC WATER CYCLE: PAST AND FUTURE CHANGES AND THEIR
IMPACTS
T. Vihma*, J. Screen, C. Deser, M. Holland, B. Newton, V. Popova, T. Prowse, M. Tjernstrom,
J. Walsh, X. Zhang

C07-O05 ARCTIC TERRESTRIAL HYDROLOGY: A SYNTHESIS OF PROCESSES, CHANGE DRIVERS
AND RESEARCH CHALLENGES
A. Bring, I. Fedorova*, Y. Dibike, L. Hinzman, J. M. Karlsson, S. H. Mernild, T. Prowse,
O. Semenova, S. Stuefer, M. K. Woo

C07-O06 EPOCH DIFFERENCES IN WATER CYCLES IN EASTERN AND WESTERN SIBERIA DURING
THE PAST TWO CENTURIES
K. Oshima*, K. Ogata, H. Park, Y. Tachibana
April 28, 2015 (Tuesday), Room 201

13:45-15:15  
Chair: Alexander Milner

C07-O07  FIRE-CAUSED NONSTATIONARITY OF HYDROLOGICAL SYSTEMS IN COLD ENVIRONMENTS: THE EXAMPLES FROM OBSERVATIONS AND MODELLING ACROSS RUSSIAN SIBERIA AND FAR EAST  
O. Semenova, L. Lebedeva*

C07-O08  STATUS & PROSPECTS OF ARCTIC FRESHWATER EXPORT  

C07-O09  A STUDY OF THE WHOLE YEAR CYCLES OF CYANOBACTERIA/MICROALGAE IN POLAR HYDROTERRESTRIAL ENVIRONMENTS  
D. Tashyreva, M. Pichrtová, J. Elster*

C07-O10  TRACE ELEMENT BIOGEOCHEMISTRY IN THAW LAKES: INFLUENCE OF ORGANIC MATTER  

C07-O11  CHANGES IN POND COMMUNITY ASSEMBLAGES AT A MORaine OF RAPID RETREATING GLACIER  
J. S. Olafsson*, R. Þ. Magnusdottir

C07-O12  PERMAFROST LAKES IN THE ARCTIC FRESHWATER ARCHIPELAGO  
W. F. Vincent*, I. Laurion

April 28, 2015 (Tuesday), Room 201

15:45-17:15  
Chair: Warwick Vincent

C07-O13  ARCTIC FRESHWATER SYNTHESIS: SOURCES, FLUXES, STORAGE AND EFFECTS  
T. Prowse*, A. Bring, E. Carmack, J. M. Karlsson

C07-O14  CLIMATE CHANGE AND WATER SOURCES IN ARCTIC STREAMS; EFFECTS ON PHYSIOCHEMICAL VARIABLES AND BIOTIC COMMUNITIES.  
A. M. Milner*, P. J. Blaen, L. E. Brown, K. K. Khamis, D. M. Hannah

C07-O15  CHANGES TO FRESHWATER SYSTEMS AFFECTING ARCTIC INFRASTRUCTURE AND NATURAL RESOURCES  
A. Instanes*

C07-O16  ARCTIC HYDROLOGICAL CHANGE: MAJOR IMPLICATIONS FOR TERRESTRIAL AND FRESHWATER ECOSYSTEMS  

Moderated Discussion

April 28, 2015 (Tuesday), Room 205

15:45-17:15  
C8: Circumpolar Arctic Coastal Communities Observatory Network: knowledge Hubs for Northern Coastal Sustainability  
Main Convener: Donald L. Forbes  
Chair: Donald L. Forbes

15:45-15:53  
Introduction

15:53-15:59  C08-O01  KNOWLEDGE HUBS FOR NORTHERN COASTAL SUSTAINABILITY  
D. L. Forbes*, J. N. Larsen, P. P. Overduin, T. Bell, R. O. Rasmussen

15:59-16:05  C08-O02  A DECADE OF ARCTIC COASTAL RESEARCH  
P. Overduin*, N. Couture, H. Lantuit

16:05-16:11  C08-O03  ASI, AHDR, AND IMPLICATIONS FOR THE CIRCUMPOLAR ARCTIC COASTAL COMMUNITIES OBSERVATORY NETWORK (CACCON)  
P. P. Schweitzer*, R. O. Rasmussen, T. Vlasova

16:11-16:17  C08-O04  EARLY CAREER PERSPECTIVES ON ARCTIC COASTAL RESEARCH PRIORITIES  
R. Riedlsperger

16:17-16:23  C08-O05  REGIONAL PRIORITIES AND PERSPECTIVES: EXAMPLE FROM CHUKOTKA  
G. Kraev*, E. Zdor

16:23-16:29  C08-O06  IDENTIFYING REGIONAL AND CIRCUMPOLAR ARCTIC COASTAL RESEARCH PRIORITIES  
T. Bell*, R. O. Rasmussen

16:29-17:15  
Moderated and recorded open discussion
April 27, 2015 (Monday), Room 205

14:00-15:30 C10: Consulting Arctic communities on research planning

Main Convener: Chris Southcott
Chair: Kirsi Latola

14:00-14:20 C10-O01 THE GRASSROOTS VOICES ARE GETTING LOUDER: HOW TO ENGAGE INDIGENOUS PEOPLE IN THE RESEARCH PROCESS
   J. Bull

   C. Southcott

14:40-15:00 C10-O03 TRANSFORMATIVE PARTNERSHIPS, KNOWLEDGE AND CHANGE: INUIT PERSPECTIVES ON ARCTIC RESEARCH – THE INUIT EXPERIENCE OF THE ARCTICNET PROGRAM
   P. Moss-Davies

15:00-15:20 C10-O04 INTERNATIONAL PROJECTS: RESULTS AND PERSPECTIVES OF THE INDIGENOUS PEOPLES’ PARTNERSHIP
   L. Abriutina

15:20-15:30 Panel discussion on consulting Arctic communities

April 27, 2015 (Monday), Room 205

16:00-17:30 C11: Early Exploration and Exploitation and their Impact Today on Local Arctic Societies

Main Convener: Peter Sköld
Chair: Peter Sköld, Gabriella Nordin

16:00-16:05 C11-O01 Introduction

16:05-16:20 C11-O02 CONSTRUCTING THE PAST OF ARCTIC FUTURES: HISTORY AND HERITAGE AS GEOPOLITICS
   D. Avango

16:20-16:35 C11-O03 THE IMPACT OF ENVIRONMENTAL CHANGE ON THE ARCTIC ABORIGINAL PEOPLE’S ECONOMY —A CASE STUDY OF THE INUIT IN CANADA
   M. Pan

16:35-16:50 C11-O04 CULTURAL CONFRONTATION OR COEXISTENCE? INDIGENOUS PEOPLES OF THE NORTH SOVIET UNION BETWEEN RESISTANCE AND CO-OPTATION
   A. A. Ivanova, F. M. Stammler

16:50-17:05 C11-O05 CULTURAL HERITAGE AS WE AFFECT IT AND IT AFFECTS US
   S. Barr

17:05-17:20 C11-O06 INDUSTRIAL HERITAGE SITES IN THE ARCTIC AS SOURCES FOR HISTORICAL RESEARCH
   D. Avango

17:20-17:30 C11-O07 concluding discussion

April 29, 2015 (Wednesday), Conference Hall

10:45-12:15 Joint Session of C04, C05, C10, C11

Panel discussion on community involvement in science and research
Carl Christian Olsen (Puju), Larisa Abryutina with Alona Yefimenko, Peter Sköld, Malgorzata Smieszek, Sharon Edmunds-Potvin (tbc)
A1: Understanding the Arctic climate change and its global influences: Japan’s contributions and suggestions for the future
April 28, 2015 (Tuesday), 17:30-19:00

A01-P01 CHANGES IN PRECIPITATION OVER THE ARCTIC PROJECTED BY GLOBAL ATMOSPHERIC MODELS WITH 20-KM AND 60-KM GRID SIZES
S. Kusunoki*, M. Hosaka, R. Mizuta, K. Yoshida, T. Ose, I. Takayabu

A01-P02 MRI LANDSURFACE MODEL HAL
M. Hosaka*

A01-P03 INTRODUCTION OF NEW LAND PROCESSES AND ITS CONTRIBUTION TO AN ATMOSPHERE-OCEAN GENERAL CIRCULATION MODEL
R. O’ishi*, K. Tanaka, K. Yoshimura, A. Abe-Ouchi

A01-P04 CLIMATE MODELLING STUDIES IN THE GRENE ARCTIC CLIMATE RESEARCH PROJECT
T. Nozawa*

A01-P05 INTEGRATING FIELD SCIENCE AND MODELING: CHALLENGES AND PERSPECTIVES
T. Ise*

A01-P06 CHARACTERISTICS OF CLOUD FRACTION AT NY-ÅLESUND IN THE ARCTIC AND SYOWA STATION IN THE ANTARCTIC
M. Miyagawa*, R. Fujimoto, M. Kuji, M. Yabuki, M. Shiobara

A01-P07 GROUND-BASED REMOTE-SENSING FOR CLOUDS, AEROSOL AND WATER VAPOR IN NY-ÅLESUND, SVALBARD AND THE GRENE ARCTIC CAMPAIGN
M. Shiobara*, M. Yabuki, K. Ohora, M. Kuji, H. Okamoto, T. Takano, H. Kobayashi, M. Koike, J. Ukit

A01-P08 TETHERED BALLOON-BORNE CLOUD MEASUREMENTS WITH CLOUD PARTICLE MICROSCOPE SONDE IN NY-ÅLESUND
K. Ohora*, M. Shiobara, K. Sato, M. Koike, T. Takano, K. Uno, J. Ukit

A01-P09 AEROSOL OPTICAL PROPERTIES OBTAINED BY SKY-RADIOMETER MEASUREMENTS AT NY-ÅLESUND, SVALBARD AND A CLOUD-SCREENING METHOD APPLIED FOR SKY-RADIOMETRY
K. Ohora*, M. Shiobara, N. Tanaka, H. Kobayashi

A01-P10 WINTER WEATHER IN JAPAN CONTROLLED BY LARGE-SCALE ATMOSPHERIC AND SMALL-SCALE OCEANIC PHENOMENA
Y. Ando*, M. Ogi, Y. Tachibana, K. Kodera, K. Yamazaki

A01-P11 SEASONAL VARIATIONS OF BLACK CARBON AND AEROSOL OPTICAL PROPERTIES OVER BARROW IN THE ARCTIC
P. R. Sinha*, Y. Kondo, J. Ogren, A. Jefferson

A01-P12 SUMMARY ON RESEARCH ACTIVITIES OF THE GRENE ATMOSPHERIC GROUP
J. Ukit*, M. Koike, Y. Miyoshi, K. Yamazaki

A01-P13 APPROACHES FOR UNDERSTANDING ARCTIC CHANGE BY CRYOSPHERIC STUDY IN THE GRENE-ARCTIC PROJECT
H. Enomoto*

A01-P14 MEASUREMENTS OF ATMOSPHERIC BLACK CARBON AEROSOLS OVER THE ARCTIC OCEAN ON R/V MIRAI DURING SEPTEMBER 2014
F. Taketani*, T. Miyakawa, Y. Komazaki, H. Takashima, X. Pan, Y. Kanaya

A01-P15 OCEANIC CO2 EVOLUTIONS AT THE FIXED STATIONS IN THE ARCTIC IN SUMMER
N. Kosugi*, D. Sasano, M. Ishii, S. Nishino, J. Inoue, H. Yoshikawa

A01-P16 STUDIES ON GREENHOUSE GAS CYCLES IN THE ARCTIC AND THEIR RESPONSES TO CLIMATE CHANGE
S. Aoki*, GRENE #5 members

A01-P17 ESTIMATING MONTHLY CO2 FLUX DISTRIBUTION IN THE ARCTIC AND ITS SPATIO-TEMPORAL VARIABILITY
S. Yasunaka*, M. Murata, E. Watanabe, N. Kosugi, D. Sasano, M. Ishii, S. Nishino, H. Uchida

A01-P18 ECOSYSTEM STUDIES OF THE ARCTIC OCEAN WITH DECLINING SEA ICE
T. Kikuchi*

A01-P19 CHARACTERISTICS OF SEA-ICE DRAFT REVEALED BY A MOORED ICE-PROFILING SONAR IN THE CHUKCHI SEA OFF BARROW, ALASKA
Y. Fukamachi*, D. Simizu, K. I. Ohshima, K. Iwamoto, H. Eicken, A. R. Mahoney

A01-P20 ARCTIC SEA ICE PREDICTION WITH A GLOBAL COUPLED ATMOSPHERE-OCEAN MODEL
M. I. Nodzu*
A01-P21 A WIND-DRIVEN, HYBRID LATENT AND SENSIBLE HEAT COASTAL POLYNYA AT BARROW, ALASKA
D. Hirano*, Y. Fukamachi, E. Watanabe, K. Iwamoto, A. Mahoney, H. Eicken, D. Shimizu, K. I. Ohshima, T. Tamura

A01-P22 COORDINATED OBSERVATIONAL AND MODELING STUDIES ON THE BASIC STRUCTURE AND VARIABILITY OF THE ARCTIC SEA ICE-OCEAN SYSTEM
H. Hasumi

A01-P23 SEA ICE PREDICTION AND CONSTRUCTION OF ICE NAVIGATION SUPPORT SYSTEM FOR THE ARCTIC SEA ROUTE
H. Yamaguchi

A01-P24 CATASTROPHIC REDUCTION OF SEA ICE: FUNDAMENTAL MECHANISMS ASSOCIATED WITH ICE-OCEAN COUPLED DYNAMICS
K. Shimada

A02-P01 SOURCES OF METEOROLOGICAL DATA FOR THE AREA OF NOVAYA ZEMLYA IN THE EARLY INSTRUMENTAL PERIOD
P. Wyszynski*, R. Przybylak, T. Strzyzewski

A02-P02 METEOROLOGICAL CONDITIONS OF THE AREA OF THE BARENTS AND KARA SEAS IN THE EARLY INSTRUMENTAL PERIOD
T. Strzyzewski*, P. Wyszynski, R. Przybylak

A02-P03 INFLUENCE OF CLIMATIC FACTORS ON THE RADIAL GROWTH OF THE LARCH AROUND RIVER KOLYMA
A. I. Kolmogorov, A. N. Nikolaev

A02-P04 COMPLEX PALEO RESEARCHES IN THE NORTHEAST OF RUSSIA
A. I. Kolmogorov*, R. M. Gorodnichev, I. M. Spiridonova, I. V. Yadzhinskii

A02-P05 PRELIMINARY RESULTS OF AN ICE CORE OBTAINED FROM NORTHWESTERN GREENLAND ICE SHEET (SIGMA-D)
H. Motoyama*, S. Matoba, K. Fujita, T. Yamasaki, Y. Omura, M. Minowa, Y. Komuro, M. Kadota, S. Yamaguchi, T. Aoki

A02-P06 CARBONACEOUS AEROSOL TRACERS IN ICE-CORES RECORD MULTI-DECADAL CLIMATE OSCILLATIONS
O. Seki*, K. Kawamura, J. Bendle, Y. Fuji

A02-P07 THE RELATION BETWEEN THERMOKARST LAKE SEDIMENTS, HOLOCENE CLIMATE DEVELOPMENT AND ICE-WEDGE PATTERNS IN NORTHERN SIBERIA

A02-P08 IMPACT OF INTERACTIVE OZONE ON CLIMATE RECONSTRUCTION IN AN EARTH SYSTEM MODEL

A02-P09 VARIABILITY OF TRACE INORGANIC SPECIES IN AN ICE CORE FROM NEEM, GREENLAND

A02-P10 GLACIAL ATLANTIC OVERTURNING CONTROLLED BY ICE SHEETS AND ATMOSPHERIC CARBON DIOXIDE
A. Abe-Ouchi

A02-P11 RELATIONSHIP BETWEEN CLIMATIC STABILITY AND MEAN CLIMATIC STATE OVER THE PAST EIGHT GLACIAL CYCLES
K. Kawamura

A02-P12 INTRODUCTION OF "LONG-TERM PLAN FOR ARCTIC ENVIRONMENTAL RESEARCH, THEME 6: FUTURE ARCTIC ENVIRONMENT EXPLORED FROM PALEOENVIRONMENTAL RECORDS" OF JAPAN
K. Kawamura

A4: Geospace over and related to the Arctic region
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A04-P01 VERTICAL STRUCTURE OF TEMPERATURE VARIATIONS IN THE MESOSPHERE AND LOWER THERMOSPHERE REGION DURING STRATOSPHERIC SUDDEN WARMING
J. H. Kim*, J. Geonhwa, Y. I. Won, B. M. Kim, H. Choi, S. J. Kim

A04-P02 COMPOUND AURORAL MICROMORPHOLOGY: GROUND-BASED HIGH-SPEED IMAGING
K. Ryuho*, F. Yoko

A04-P03 VARIATIONS OF TEMPERATURE AND WINDS IN THE MESOSPHERE AND LOWER THERMOSPHERE ABOVE TROMSØE
A04-P04 UPPER ATMOSPHERE COOLING OVER THE PAST 33 YEARS

A04-P05 NIPR TRAJECTORY MODEL (NITRAM) AND METEOROLOGICAL FIELD DISPLAY SYSTEM
Y. Tomikawa*

A04-P06 FURTHER OBSERVATIONS OF 4FCE AURORAL ROAR
Y. Sato*, A. Kadokura, Y. Ogawa, A. Kumamoto, Y. Katoh

A04-P07 CURRENT STATUS OF UPPER ATMOSPHERE PHYSICS OBSERVATION IN ICELAND IN 2015

A04-P08 IUGONET TOOLS FOR INTERDISCIPLINARY STUDY ON UPPER ATMOSPHERE
Y. Tanaka*, S. Abe, Y. Koyama, A. Shinbori, N. Umemura, M. Yagi, A. Yatagai, S. UeNo

A04-P09 PERIODIC VARIATION CHARACTERISTICS OF THE HIGH-LATITUDINAL TROPOPAUSE OVER POINT BARROW (71.3°N, 156.8°W)
R. Wang*, S. Zhang, H. Yang

A04-P10 EFFECTS OF COSMIC RAY INPUT ON CLOUDS AND CLIMATE IN ANTARCTICA

A04-P11 LONG TERM METEOR WIND RADAR OBSERVATIONS IN ARCTIC NORWAY
M. Tsutsumi*, C. Hall

A04-P12 ROSMIC: A PROJECT IN THE SCOSTEP VARSITI PROGRAM
W. Ward*, F. J. Luebken, A. Seppala

A04-P13 STUDY ON GENERATION MECHANISMS OF A SPORADIC SODIUM LAYER ABOVE TROMSOE, NORWAY DURING A NIGHT OF THE HIGH AURORA ACTIVITY

A04-P14 SEASONAL VARIATION AND SOLAR ACTIVITY DEPENDENCE OF THE QUIET-TIME IONOSPHERIC TROUGH
T. Ishida*, Y. Ogawa, A. Kadokura, Y. Hiraki, I. Haggstrom

A06-P01 EFFECT OF THAW DEPTH ON FLUXES OF CO2 AND CH4 IN MANIPULATED ARCTIC COASTAL TUNDRA OF BARROW, ALASKA
Y. Kim*, W. Oechel

A06-P02 ACCUMULATION OF CARBON AND NITROGEN IN VEGETATION AND SOILS OF DEGLACIATED AREA AND MUDBOILS IN ELLESMERE ISLAND, HIGH-ARCTIC CANADA
T. Osono*, A. S. Mori, M. Uchida, H. Kanda

A06-P03 VEGETATION MAPPING AND ESTIMATION OF REGIONAL CH4 EMISSION FOR TAIGA-TUNDRA BOUNDARY IN EAST SIBERIA
T. Morozumi*, I. Bragin, R. Shingubara, S. Takano, S. Tei, T. C. Maximov, A. Sugimoto

A06-P04 LINKAGE BETWEEN PHOTOTROPH COMMUNITY STRUCTURES AND THE PHOTOSYNTHESIS OF DIFFERENTLY PIGMENTED GROUPS OF BIOLOGICAL SOIL CRUSTS IN A HIGH ARCTIC GLACIER FORELAND, SVALBARD
Y. Tanabe*, J. Uetake, S. Masumoto, M. Uchida

A06-P05 METHANE EXCHANGE IN A POORLY-DRAINED BLACK SPRUCE FOREST OVER PERMAFROST OBSERVED WITH THE EDDY COVARIANCE TECHNIQUE

A06-P06 INTERANNUAL VARIATION IN CH4 EFFLUX AT TAIGA-TUNDRA BOUNDARY ON THE LOWLAND OF INDIGIRKA RIVER
R. Shingubara*, A. Sugimoto, J. Murase, S. Tei, S. Takano, T. Morozumi, G. Iwahana, T. C. Maximov

A06-P07 CHANGE IN PHOTOSYNTHETIC CAPACITIES OF EARLY SUCCESSIONAL ECOSYSTEM AFTER WILDFIRES IN INTERIOR ALASKA
N. Tahara*, M. Ueyama, H. Nagano, H. Iwata, Y. Harazono

A06-P08 AN IMPORTANT OF BRANCH-BRANCH INTERACTION WITHIN CROWN OF OPEN-GROWN BLACK SPRUCE IN CENTRAL ALASKA
T. Shirota*, K. Yasue, A. Osawa

A06-P09 SPATIAL VARIATION OF SNOW COVER IN INDIGIRKA LOWLAND OBSERVED IN SPRING 2014
S. Takano*, S. Tei, A. Sugimoto, T. C. Maximov

A06-P10 THE EFFECTS OF CLIMATE MANIPULATION ON SOIL ORGANIC CARBON CHARACTERISTICS IN NORTHEAST GREENLAND
J. Y. Jung*, A. Michelsen, N. M. Schmidt, Y. K. Lee

A06-P11 INFLUENCE OF THE THAWING PERMAFROST ON METHANE DIFFUSION FLUX FROM LAKES IN THE ALASKAN ARCTIC ZONE
M. Sasaki*
A06-P12 SPATIAL PATTERNS AND INTER-TREE INTERACTION IN A MATURE LARIX SIBIRICA STAND AT THE NORTHERN ECOTONE IN MONGOLIA
D. Saito*, T. Shirota, T. Tanabe, K. Yasue, N. Baatarbileg

A06-P13 BRANCHING PROPERTIES OF DECLINING LARIX SIBIRICA TREES IN NORTHERN MONGOLIAN BOREAL FOREST
T. Tanabe*, T. Shirota, D. Saito, K. Yasue, N. Baatarbileg

A06-P14 THE RATE OF PERMAFROST CO2 AND METHANE RELEASE UNDER AEROBIC ANDANAEROBIC CONDITIONS USING A SPECIALLY DESIGNED LOWER TEMPERATURECONTROLLED INCUBATION SYSTEM AND ITS POTENTIAL EFFECTS ON WARMINGCLIMATE
S. Yonemura*, M. Uchida, M. Kondo

A06-P15 EVAPOTRANSPIRATION AND CARBON DIOXIDE FLUXES OVER LARCH FORESTS WITHDIFFERENT SOIL WATER CONDITION AT EASTERN SIBERIA
A. Kotani*, T. Ohta, T. Maximov

A06-P16 TERRESTRIAL ECOSYSTEMS OF THE NOVOSIBIRSK ARCHIPELAGO (ARCTIC OCEAN, RUSSIA): CURRENT STATUS AND NEW THREATS
I. M. Okhlopkov*, V. E. Kolodeznikov, R. V. Desyatkin, S. Tatsuzawa, N. G. Solomonov

B1: Arctic Climate Change and Potential Mid-latitude Weather Linkages: Large-scale Atmospheric Circulation and Storm Track Dynamics
April 29, 2015 (Wednesday), 17:30-19:00

B01-P01 AIR TEMPERATURE AND PRECIPITATION ON THE KAFFIØRA PLAIN AND THE WALDEMAR GLACIER (NW SPITSBERGEN) FROM 1978 TO 2014
R. K. Przybylak*, A. Arazny

B01-P02 ROLE OF SEA ICE REDUCTION IN EURASIAN WINTERTIME COOLING
S. Outter*, I. Esau

B01-P03 THE GREENLAND BLOCKING INDEX 1948-2014: A KEY INDICATOR OF ARCTIC-MID LATITUDE WEATHER/CLIMATE COUPLING?
E. Hanna

B01-P04 EFFECTS OF THE RECENT ARCTIC SEAICE REDUCTION ON THE VERTICAL COUPLING PROCESS BETWEEN THE TROPOSPHERE AND STRATOSPHERE

B01-P05 ATMOSPHERIC RESPONSE TO ANOMALOUS SEA ICE IN THE SEA OF OKHOTSK
K. Nishii*, H. Nakamura, T. Nakamura

B01-P06 PERSISTENT COOLING OF THE POLAR STRATOSPHERE IN 2011 WINTER AND SPRING
K. Nishii*, H. Nakamura, Y. J. Orsolini

B01-P07 INFLUENCE OF THE GULF STREAM ON THE BARENTS SEA ICE RETREAT AND EURASIAN COLDNESS DURING EARLY WINTER
K. Sato*, J. Inoue, M. Watanabe

B01-P08 IMPACT OF ZONAL WIND CHANGES ON THE INSTABILITY RATES OF PLANETARY AND BAROCLINIC WAVES
B. Crasemann*, H. L. Tanaka, K. Dethloff, D. Handorf, R. Jaiser

B01-P09 A STUDY ON THE CYCLOGENESIS OF THE ARCTIC CYCLONE FROM THE PERSPECTIVE OF QUASI-GEOSTROPHIC POTENTIAL VORTICITY
H. Asai*, J. Inoue, N. Sato

B01-P10 THE EXTREME EUROPEAN COLD SPELL IN 2011/12 WINTER. PART II: THREE-DIMENSIONAL STRUCTURE OF ANOMALIES AND IMPORTANCE OF ENERGY CONVERSION FOR THEIR MAINTENANCE
H. Nakamura*, L. Wang, K. Nishi

B01-P11 THE IMPORTANCE OF PHYSICAL PARAMETERIZATION IN THE WRF MODEL TO REPRODUCE ATMOSPHERIC DYNAMICS AND BLACK CARBON TRANSPORT IN THE ARCTIC: A SENSITIVITY STUDY.
C. Cavazos-Guerra*, A. Lauer

B2: Current and Future Observing Strategies for Understanding the Evolving Arctic Climate and Ecological System
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B02-P01 SVALBARD INTEGRATED ARCTIC EARTH OBSERVING SYSTEM (SIOS): A RESEARCH INFRASTRUCTURE FOR ARCTIC EARTH SYSTEM SCIENCE
J. B. Oerbaek*, O. D. Christine, R. Roenneberg, B. L. Bente, H. D. Kaja, L. Kresse

B02-P02 HERBIVORY NETWORK: AN INTERNATIONAL, COLLABORATIVE EFFORT TO STUDY HERBIVORY IN NORTHERN AND ALPINE ENVIRONMENTS

B02-P03 ARCTIC OCEAN BOUNDARY ARRAY: METHODS, AND MODELLED SEASONALITY OF FLUXES AND STORAGE
S. Bacon*, Y. Aksenov
B02-P04 ARCTIC SEA ICE MONITORING AND RESEARCH THROUGH INDIGENOUS AND COMMUNITY-BASED OBSERVATIONS
K. Mette, H. Eicken*, P. Pulsifer, I. Holak, B. Sheffield

B02-P05 ICE-ARC: ICE, CLIMATE, AND ECONOMICS – ARCTIC RESEARCH ON CHANGE - EU FUNDED PROJECT
E. A. K. Ford, J. Wilkinson*

B3: Changing permafrost and its impact on the physical, ecological, economic and cultural Earth system
April 29, 2015 (Wednesday), 17:30-19:00

B03-P01 PERMAFROST AND INDIGENOUS LAND USE IN THE NORTHERN URALS: KOMI AND NENETS REINDEER HUSBANDRY
J. O. Habeck*, K. V. Istomin

B03-P02 MAPPING PERMAFROST-RELATED TERRAIN FEATURES WITH PURVIEW
S. J. McCuaig*

B03-P03 UNDERSTANDING THERMOKARST LAKE DYNAMICS IN ARCTIC ALASKA: CASE STUDIES BASED ON SEDIMENT CORES
J. Lenz*, S. Wetterich, B. M. Jones, G. Grosse

B03-P04 SIMULATING A ROLE OF NATURAL FIRE DISTURBANCE ON THE SOIL CARBON STORAGE OF BOREAL FOREST AND TUNDRA ECOSYSTEMS IN ALASKA

B03-P05 INTRINSIC CHEMICAL CONVERSION OF HEAVY METAL IN POLAR REGION
K. Kim*

B03-P06 SIZE AND FREQUENCY DISTRIBUTION OF THERMOKARST LAKES IN THE EASTERN SIBERIA
H. Saito*, Y. Iijima, M. Ulrich

B4: Arctic snow cover changes and their consequences
April 29, 2015 (Wednesday), 17:30-19:00

B04-P01 SCANNING PAN-ARCTIC SNOW CONDITIONS OF FREEZING AND MELTING FOR ANALYZING REGIONAL AND INTERANNUAL CHANGES, AND APPLICATION TO FIELD OBSERVATION PLANNING
N. Alimasi*, H. Enomoto, K. Sugiura, M. Hori, T. Kameda

B04-P02 MEASUREMENTS OF CHEMICAL COMPOSITIONS IN THE SNOW COVER AT MT. TATEYAMA, JAPAN
K. Watanabe*

B04-P03 SOLAR HEATING IN SNOWPACK AND RADIATIVE FORCING BY SNOW IMPURITIES EVALUATING BY A PHYSICALLY BASED SNOW ALBEDO MODEL
T. Aoki*, K. Kuchiki, M. Niwano, S. Matoba, Y. Kodama

B04-P04 RUSSIA-JAPAN COLLABORATIVE STUDIES ON GEOGRAPHIC AND ECOLOGICAL CHANGES OF LARGE MAMMAL FAUNA IN THE ARCTIC AND SUB-ARCTIC YAKUTIA.
S. Tatsuzawa*, I. Okhlopkov, N. Solomonov, E. Nikolaev, R. Kirillin, E. Kirillin

B5: Remote Sensing of the Arctic System
April 29, 2015 (Wednesday), 17:30-19:00

B05-P01 A LONG-TERM DATASET OF SATELLITE-DERIVED NORTHERN HEMISPHERE SNOW COVER PROPERTIES IN 5KM SPATIAL RESOLUTION PREPARED FOR JAXA’S GCOM-C MISSION
M. Hori*

B05-P02 VALIDATION OF SNOW DEPTH BY MICROWAVE REMOTE SENSING WITH IN-SITU FIELD DATA
Y. Kim*, H. Enomoto

B05-P03 SURFACE AND SUBSURFACE CONDITIONS AND SATELLITE IMAGES IN PERMAFROST AREA AFTER WILDFIRE, SEWARD PENINSULA, ALASKA

B05-P04 REGIONAL CO2 UPTAKE ESTIMATION APPLYING THE LIGHT USE EFFICIENCY MODEL WITH MODIS AND FIELD DATA TO EXAMINE WILDFIRE EFFECTS IN ALASKAN BOREAL FOREST

B05-P05 APPLICATION OF MULTICOPTER FOR SNOW CONDITION MEASUREMENTS IN THE MOUNTAIN RANGE
K. Sugiura*, N. Wada

B05-P06 DETECTION OF MELT POND DISTRIBUTION ON THE ARCTIC SEA ICE FROM SATELLITE MICROWAVE DATA
Y. Tanaka*, K. Tateyama, T. Kameda, H. Enomoto
B05-P07 ARCTIC SEA ICE AND MELT POND CHARACTERISTICS OBSERVED BY VERY HIGH RESOLUTION REMOTELY SENSED DATA
J. W. Park*, H. C. Kim, S. H. Hong, C. U. Hyun

B05-P08 PRIMARY PRODUCTIVITY ALGORITHM ROUND ROBIN (PPARR) OF SATELLITE-BASED MODELS FOR THE ARCTIC OCEAN
Y. J. Lee*, P. A. Matrai, M. A. M. Friedrichs, V. S. Saba

B05-P09 MELT POND DELINEATION FROM ARCTIC SEA ICE USING VHR SATELLITE IMAGE
C. U. Hyun*, H. C. kim

B05-P10 ARCTIC SEA ICE THICKNESS MONITORING USING CRYOSAT-2 SATELLITE DATA
S. Lee*, J. Im, H. Han, J. Kim

B05-P11 OBSERVATION OF ARCTIC SEA ICE CONDITION IN THE CANADA BASIN IN 2014 SUMMER -FROM JOIS2014 CRUISE- 
S. Hoshino*, Y. Tanaka, K. Tateyama, H. Yamaguchi, K. Shimada

B05-P12 COLOR MONITORING ON ALPINE SNOWPACK FOR EVALUATION OF VOLCANIC GAS DIFFUSION
K. Sazawa*, K. Higuchi, H. Kuramitz, K. Kawamura, N. Wada

B05-P13 ULTRA-STABLE, HIGH POWER SODIUM TEMPERATURE/WIND LIDAR DEPLOYED AT EISCAT RADAR SITE, NORWAY (69.6°N, 19.2°E)

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B6: A Pan-Arctic Challenge: Predicting the Future of Marine Biota and Ecosystem Connectivity Through Field Studies and Data Integration
April 28, 2015 (Tuesday), 17:30-19:00

B06-P01 SMALL- AND MESOSCALE VARIABILITY OF BENTHIC FOOD WEBS IN ARCTIC
J. Legezynska*, A. Zaborska, M. W. Kowalczyk, E. Jankowska, K. Pazdro

B06-P02 THE SOURCES OF FOOD FOR BENTHIC COMMUNITIES IN THE TWO ARCTIC FIORDS CHARACTERISED BY DIFFERENT ENVIRONMENTAL CONDITIONS
A. Zaborska*, J. Legezynska, M. W. Kowalczyk

B06-P03 SEASONAL VARIABILITY IN HIGH ARCTIC FIORD BENTHIC FOOD WEB – STABLE ISOTOPE CASE STUDY
M. Kedra*, K. Karol, A. Winogradow, M. Nathalie, S. Bourgeois, J. Richard

B06-P04 MEIOFAUNAL COMMUNITIES ALONG AN OFFSHORE GRADIENT IN TWO GLACIAL SPITSBERGEN FIORDS
K. Grzelak*, M. Gluchowska, K. Gregorczyk, J. M. Weslawski

B06-P05 CHANGES IN ARCTIC BENTHOS – DEMAND FOR A “FUNCTIONAL ATLAS”
R. Degen*, T. Brey, A. Boetius, D. Piepenburg

B06-P06 A PAN-ARCTIC OR POLAR CHALLENGE? INSIGHTS FROM A COMPARATIVE STUDY OF BENTHIC FUNCTIONS ON BOTH POLES
H. Link, D. Piepenburg*, P. Archambault

B06-P07 ARCTIC OCEAN NUTRIENTS AND CARBON BIOGEOCHEMISTRY STUDIES FROM THE EMERGING PAN-ARCTIC HYDROGRAPHIC ARRAY
S. Torres-Valdes*, T. Tsubouchi, G. MacGilchrist, A. Naveira-Garabato, D. Davey, S. Bacon

B06-P08 SPATIAL DISTRIBUTION AND CHARACTERISTICS OF DISSOLVED ORGANIC MATTER IN THE BEAUFORT AND CHUKCHI SEAS
Y. Lee*, S. Y. Ha, J. O. Min, E. J. Yang, S. H. Kang

B06-P09 ADAPTABILITY TO ENVIRONMENTAL CHANGE IN A HIGH-LATITUDE FIORD ECOSYSTEM: THE KONGSFJORDEN ECOSYSTEM FLAGSHIP PROGRAM
H. Hop, K. Bischof, R. Neuber*, G. W. Gabrielsen, M. J. Leslawski, Ch. Wiencke

B06-P10 DISTRIBUTIONS OF THE PACIFIC-ORIGIN WATERS IN THE CHUKCHI BORDERLAND, 2010-2014

B06-P11 LOCALISED SHELF-BREAK UPWELLING AND DOWNWELLING AND ALSONGSHELF FLOW ON THE CANADIAN BEAUFORT SHELF – RESPONSE AT CAPE BATHURST AND HERSCHEL ISLAND TO ALONG-SHELF WIND AND FLOW.
W. J. William*, M. Humphrey

B06-P12 SEASONAL AND ANNUAL FLUX CHANGES OF MICROZOOPLANKTON (RADILARIA) IN THE WESTERN ARCTIC OCEAN: ENVIRONMENTAL INDICES IN A WARMING ARCTIC
T. Ikenoue

B06-P13 SEASONAL AND INTERANNUAL VARIABILITY OF REMOTELY SENSED CHLOROPHYLL-A IN ARCTIC OCEAN DURING A RECENT DECADE
J. Park*, E. Ko, S. H. Kang

B06-P14 DIEL VERTICAL MIGRATION OF ARCTIC Copepods UNDER SEA ICE IN THE CANADA BASIN
B06-P15  SEASONAL CHANGE OF SOUND SCATTERS DERIVED FROM ZOOPLANKTON IN THE SOUTHERN CHUKCHI SEA  
M. Kitamura*, K. Amakasu, S. Nishino, T. Kikuchi

B06-P16  GROWING OF THE ARCTIC MARINE ECOSYSTEM - FOOD-WEB TRAITS OF THE HIGH LATITUDE SPITSBERGEN FJORDS ECOSYSTEMS WITH CONTRASTING OCEANOGRAPHIC CONDITIONS  

B06-P17  DETERMINATION OF PHOTOSYNTHETIC PIGMENT PRODUCTION RATE AND DISSOLVED FREE AMINO ACID FROM MELTING PONDS ON ARCTIC SEA ICE  

B06-P18  ASSESSMENT OF THE RELATIONSHIP BETWEEN TIMING OF SEA-ICE RETREAT AND PHYTOPLANKTON COMMUNITY SIZE STRUCTURE IN THE BERING AND CHUKCHI SEA SHELF REGION: A REMOTE SENSING APPROACH  

B07: Atmosphere-ocean-ice interactions and aspects related to a future, seasonally ice free Arctic Ocean  
April 29, 2015 (Wednesday), 17:30-19:00

B07-P01  ENHANCING CALCULATION OF THIN SEA ICE GROWTH  
I. Appel*

B07-P02  THE ARCTIC SEA ICE SEASONALITY INDEX  
T. Haine*, T. Martin

B07-P03  CHANGE IN SEA ICE THICKNESS CAUSED BY THE ICE MOTION  
N. Kimura*, K. Tateyama, H. Yamaguchi

B07-P04  THE SEA ICE ALBEDO FEEDBACK IN ACTION: A CASE STUDY  
A. West, J. Ridley*

B07-P05  SPATIAL DIVERSITY OF AIR RELATIVE HUMIDITY IN THE NORTHERN PART OF THE KAFFIÖYRA PLAIN AND ON THE WALDEMAR GLACIER (NW SPITSBERGEN) FROM SEPTEMBER 2010 TO AUGUST 2013  
P. U. Monarcha*, R. Przybylak, A. Arazny

B07-P06  CHANGES OF HEAT BALANCE IN HORNISUND (SW SPITSBERGEN) IN THE PERIOD FROM MAY TO OCTOBER 2014  
R. K. Przybylak*, P. Włodzimierz, A. Andrzej, W. Przemyslaw, F. Krzysztof

B07-P07  CHANGES TO THE SURFACE WAVE BOUNDARY LAYER IN THE PRESENCE OF PARTIAL ICE COVER  
S. Zippel*

B07-P08  MID-WINTER FREEZE EXPERIMENT IN THE ARCTIC OCEAN: NORWEGIAN YOUNG SEA ICE CRUISE (N-ICE2015)  

B07-P09  CONTINUOUSLY RADIOSONDE OBSERVATION ON-ICE AND OFF-ICE BY ICEBREAKER PASSING THROUGH MARGINAL ICE ZONE IN LAPTEV SEA  
K. Komatsu*, Y. Tachibana, V. Alexeev

B07-P10  HORIZONTAL VARIABILITY SPECTRUM IN THE ARCTIC OCEAN  
C. Marcinko*

B07-P11  IN SITU MEASUREMENTS OF AN ENERGETIC WAVE EVENT IN THE ARCTIC MARGINAL ICE ZONE  
C. O. Collins*, W. E. Rogers, A. Marchenko, A. V. Babanin

B07-P12  DELAYED RESPONSE OF THE OCEANIC BEAUFORT GYRE TO WIND SEA ICE MOTION: INFLUENCES ON RECENT SEA ICE REDUCTION IN THE PACIFIC SECTOR OF THE ARCTIC OCEAN  

B07-P13  FORCING, VARIABILITY, AND PATHWAY OF A SIBERIAN BUOYANCY-DRIVEN CURRENT AND ITS IMPLICATIONS FOR ARCTIC FRESHWATER VARIABILITY  
M. Janout*, Y. Aksenov, J. Hoelermann, B. Rabe, U. Schauer, M. Karcher, Y.-D. Lenn, I. Polyakov, S. Bacon, A. Coward, H. Kassens, L. Timokhov

B07-P14  MAGNITUDE AND VARIATION OF UNDER ICE PRIMARY PRODUCTION IN THE ARCTIC OCEAN  
M. Jin*

B07-P15  NUTRIENT SUPPLY AND BIOLOGICAL RESPONSE CAUSED BY WIND-INDUCED FORCING IN THE NORTHERN CHUKCHI SEA  

B07-P16  ATMOSPHERIC FORCING OF TRANSPORT OF POLAR WATER AND SEA ICE OVER THE NORTH ICELANDIC SHELF  
S. Jonsson*, H. Valdimarsson (29)
B8: From human security to geopolitical dynamics in the Global Arctic: the global implications of rapid environmental, economic, and societal change

April 29, 2015 (Wednesday), 17:30-19:00

B08-P01 PSYCHOLOGICAL SAFETY OF SHIFT WORKERS IN THE ARCTIC
T. Tyulyubaeva*, N. Simonova

B9: Arctic Governance, Sustainable Development of Local Communities and Non-Arctic State’s Contribution

April 28, 2015 (Tuesday), 15:45-17:15

B09-P01 THE NORTHERN INDIGENOUS PEOPLES AND CO-MANAGEMENT OF THE RUSSIAN ARCTIC TERRITORIES IN THE PERIOD OF INDUSTRIAL DEVELOPMENT
E. Gladun’, G. Chebotarev

B09-P02 RUSSIAN COAL MINING IN SVALBARD: PATHS TO SUSTAINABILITY
A. Vlakhov

B09-P03 IMPORTANCE OF NORTHERN RESOURCES OF YAKUTIA AND ECOLOGICAL ASPECTS OF ARCTIC DEVELOPMENT
A. K. Lazareva

B09-P04 STAGES OF TAIGA-ALAS LANDSCAPES SETTLING IN CENTRAL YAKUTIA
R. Desyakin

B09-P05 COMPARISON OF THE DEFINITION OF INDIGENOUS PEOPLE IN RUSSIAN AND INTERNATIONAL LAW
A. A. Petrova

B09-P06 ARCTIC SHIPPING AND ASIAN SHIPPING COMPANIES: A REAL INTEREST?
F. Lasserre

B10: Ice mass loss in Greenland and Arctic glaciers under the influence of changing atmosphere and the ocean
Subtitle: Dynamics of the Greenland ice sheet

April 29, 2015 (Wednesday), 17:30-19:00

B10-P01 RECENT THINNING OF BOWDOIN GLACIER, A MARINE-TERMINATING OUTLET GLACIER IN NORTHWESTERN GREENLAND

B10-P02 SURFACE ELEVATION CHANGE ON ICE CAPS IN NORTHWESTERN GREENLAND
J. Saito*, S. Tsutaki, T. Sawagaki, S. Sugiyama

B10-P03 EVOLUTION OF SVALBARD LAND-TERMINATING GLACIERS OVER THE 21ST CENTURY
F. J. Navarro*, M. Moeller, A. Martin-Espanol, R. L. Finkelnburg

B10-P04 GLACIER AND ROCK TEMPERATURE CHANGES IN THE SUNITAR-KHAYATA RANGE (NORTHEASTERN RUSSIA) OVER THE LAST 50 YEARS

B10-P05 SPATIAL AND TEMPORAL DISTRIBUTIONS OF HIGH TURBIDITY OCEAN WATER OFF THE NORTHWESTERN GREENLAND COAST
Y. Ohashi*, T. Iida, S. Sugiyama

C2: Arctic in Rapid Transition - future research directions from the perspective of early career scientists

April 29, 2015 (Wednesday), 17:30-18:45

C02-P01 PERMAFROST YOUNG RESEARCHERS NETWORK (PYRN): PERSPECTIVES AND PRIORITIES OF THE NEXT GENERATION ON PERMAFROST RESEARCH

C02-P02 ARCTIC IN RAPID TRANSITION (ART) - A PAN-ARCTIC NETWORK INTEGRATING PAST, PRESENT AND FUTURE
C02-P03 PARASITES OF SHORTHORN SCULPIN (MYXOCEPHALUS SCORPIUS) IN LITTORAL MARINE HABITATS OF SVALBARD
T. Tyml*, O. Ditrich

C02-P04 Communicating Arctic Science through Social Media - Experience of a Researcher-Driven Effort of @OceanSeaIceNP
A. K. Pavlov*, M. A. Granskog, S. R. Hudson, S. Gerland

C02-P05 Association of Polar and Early Career Scientists (APECS) Nordic Research Project: “Bridging Early Career Researchers and Indigenous Peoples in Nordic Countries”
S. A. Juiulainen*, J. Bull, Y. Sjoberg, Y. Zaika, L. Fleming-Sharp, G. Fugmann

C02-P06 Transformation of Frozen Peatlands Soils under the Influence of Cryogenic Processes
O. A. Ogneva*, G. V. Matyshak, O. J.‘ Goncharova, A. A. Bobrick

C3: Emerging questions in Arctic Geoscience
April 28, 2015 (Tuesday), 17:30-19:00

C03-P01 The High Resolution Record of Atmospheric Selenium Recovered from Greenland Snow
K. Lee*, S. B. Hong, J. Lee, J. Chung, S. D. Hur, S. Hong

C4: Co-design, co-production, co-communication of scientific knowledge? How to frame concerted research for sustainable development in times of change
April 28, 2015 (Tuesday), 17:30-19:00

C04-P01 Potential Benefits and Challenges of Establishing Two-Way Communication between Geoscientists and Community Stakeholders in Rural Alaska
Y. Kontar*

C04-P02 Polar Educators International and Its Contribution to ICARP III
I. Beck*, G. Wesche, P. Azinhaga, L. Huffman

C5: Advances in Transdisciplinary Arctic Research: Progress on Building Collaborative Agendas for Research Supporting Solutions for Sustainability
April 29, 2015 (Wednesday), 17:30-18:45

C05-P01 Bilingualism and Loss of Native Language Minorities of the North Russia
S. A. Myznikov*

C05-P02 Promoting Environmental and Socio-Economic Sustainability in Rural Alaska through Transdisciplinary Research and Collaborative Engagement between Scientists, Policy Makers and Stakeholders in Decision-Making
Y. Kontar*

C05-P03 Programs of Health and Well-Being in the Arctic
A. Rautio*, G. Mulvad

C05-P04 Creation of Federal University as a Research and Education Center in Northeast of Russia
A. Nikolaev*, E. Mikhailova

O. A. Lazebnik, A. N. Savvinova*, V. V. Filippova, G. Fondahl, G. Poelzer

C05-P06 APECS: A Network for Polar Early Career Scientist Professional Development
S. Majaneva*, G. Fugmann

C6: Understanding Sustainability in the Arctic: From Patchwork to Framework
April 28, 2015 (Tuesday), 17:30-19:00

C06-P01 The Effects of Climate Change on Tozhu Reindeer Herders in Southern Siberia
T. Arakchaa*

C06-P02 Towards Coexistence of Oil and Gas Industry with Indigenous Communities in the Russian Arctic
M. Tysiachniouk*, M. Lamers

C06-P03 Labour Market Outcomes of Migrant Women in Văsterbotten and Norrbotten
E. Kotyrlo*

C06-P04 Sustainable Economic Activities in the Arctic Region
A. Kornilova*
C7: The Arctic system; changes and effects with emphasis on freshwater ecosystems
April 28, 2015 (Tuesday), 17:30-19:00

C07-P01 WATER STORAGE CHANGES ON ARCTIC WATERSHEDS. CONTRIBUTION OF FUTURE SWOT MISSION
E. A. Zakharova*, A. V. Kouraev, D. Blumstein, C. Lyon

C07-P02 12 YEARS’ CHANGES OF THE TERRESTRIAL WATER STORAGE IN THE LENA RIVER BASIN, EASTERN SIBERIA DETECTED BY GRACE
K. Suzuki*

C07-P03 INCREASES IN PAN-ARCTIC RIVER WATER TEMPERATURE AND HEAT FLUX TO THE ARCTIC OCEAN
H. Park*

C07-P04 FRESHWATER DIATOM ASSEMBLAGES FROM YAKUTIA, EASTERN SIBERIA: PATTERN, DIVERSITY, AND RELATIONSHIP TO ENVIRONMENTAL PARAMETERS
L. Pestryakova*

C07-P05 THERMAL EFFECTS FROM GROUNDWATER FLOW - A CASE STUDY FROM A SUBARCTIC FEN WITHIN THE SPORADIC PERMAFROST ZONE OF TAVVAVUOMA, SWEDEN
Y. Sjoberg*, S. W. Lyon, E. Coon, D. Harp, R. Pannetier, A. Frampton, S. L. Painter

C07-P06 CYANOBACTERIAL DIVERSITY ALONG A LATITUDINAL ARCTIC GRADIENT
D. Velazquez*, M. Failde, W. F. Vincent, A. Quesada

C07-P07 WARD HUNT LAKE: A SENTINEL ECOSYSTEM AT THE TOP OF THE CANADIAN HIGH ARCTIC
P. N. Begin*, W. F. Vincent

C8: Circumpolar Arctic Coastal Communities Observatory Network: knowledge Hubs for Northern Coastal Sustainability
April 28, 2015 (Tuesday), 17:30-19:00

C08-P01 COASTAL INDIGENOUS COMMUNITIES’ PROBLEMS ASSOCIATED WITH PERMAFROST CHANGES IN EASTERN CHUKOTKA
A. Maslakov*

C08-P02 NEW INSIGHTS INTO COASTAL EROSION RATES ALONG THE YUKON COAST, CANADA
A. M. Konopczak*, H. Lantuit, G. Manson, N. Couture

C08-P03 MORALITY, PRACTICE AND ECONOMY IN A COMMERCIAL SEAL HUNTING COMMUNITY IN CANADA
N. P. Sellheim*

C08-P04 RESILIENCE IN A COASTAL SÁMI COMMUNITY – CHALLENGES TO CURRENT AND FUTURE RESILIENCE AND SUSTAINABLE DEVELOPMENT
H. Amundsen, G. K. Hovelsrud, S. Rybraaten, H. Danneving*

C10: Consulting Arctic communities on research planning
April 28, 2015 (Tuesday), 17:30-19:00

C10-P01 BRAIDING THE DISCOURSE OF COLONIZATION, STRUCTURAL RACISM AND INEQUALITY: HOW IT IMPACTS INDIGENOUS LIVES IN CANADA, FINLAND AND NORWAY.
S. A. Juutilainen’