

C1: Sharing Arctic data, observations and knowledge: understanding the global system through international exchange

Main Convener: Peter L. Pulsifer

April 27 (Monday), Room 204, 14:00-15:30

- C01-001 THE EVOLUTION OF NSF ARCTIC DATA MANAGEMENT: CHALLENGES AND LESSONS LEARNED AFTER TWO DECADES OF SUPPORT
J. A. Moore*, S. F. Williams
- C01-002 DEVELOPMENT OF ARCTIC DATA ARCHIVE SYSTEM (ADS)
H. Yabuki*, T. Sugimura, T. Terui
- C01-003 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
- C01-004 NORDIC RESEARCH PROGRAMME ON INTERACTION BETWEEN CLIMATE CHANGE AND CRYOSPHERE – AN EXAMPLE OF SUCCESSFUL SHARING OF RESOURCES
M. Friberg*, K. Kristjansson, A. K. Shfaqat, H. Hautala, H. Farbrot, J. K. Sundet
- C01-005 ARCTICCONNECT: A PLATFORM FOR KNOWLEDGE SHARING AND COLLABORATION
S. Vossepoel*, M. S. Murray, S. Liang, B. Chu, B. Panikkar, J. Badger
- C01-006 ESTABLISHING AN ARCTIC DATA NETWORK THROUGH INTERNATIONAL COLLABORATION
P. L. Pulsifer*, V. Rachold, J. R. Larsen, O. Godoy, J. Friddell, H. Lappalainen, Y. Qiu
- C01-007 THE ARCTIC OBSERVING SUMMIT: AN ACTIVITY OF THE INTERNATIONAL STUDY OF ARCTIC CHANGE AND A SAON TASK
M. S. Murray*, P. Schlosser, G. Ibarguchi, L-M. van der Watt
- C01-008 THE GLOBAL TERRESTRIAL NETWORK FOR PERMAFROST (GTN-P) DATA MANAGEMENT SYSTEM WITHIN THE FRAMEWORK OF THE ARCTIC DATA INTERFACE (ADI)
J.-P. F. Lanckman*, H. Johannsson, A. K. Karlsson, B. Biskaborn

April 27 (Monday), Room 204, 16:00-17:30

- C01-009 DEVELOPMENT OF THE VESSEL NAVIGATION SUPPORT SYSTEM FOR SEA ICE AREA
T. Terui*, T. Sugimura, D. Shimizu, T. Tamura, H. Yabuki
- C01-010 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
- C01-011 DEVELOPMENT OF ONLINE VISUALIZATION TOOL "VISION"
T. Sugimura*, T. Terui, H. Yabuki
- C01-012 POLAR AND ALPINE MICROBIAL COLLECTION (PAMC): A CULTURE COLLECTION DEDICATED TO POLAR AND ALPINE MICROORGANISMS
Y. M. Lee*, G.H. Kim, S. G. Hong, H. K. Lee
- C01-013 BARENTS SEA BENTHIC FAUNA IN A CHANGING SEA
L. L. Jorgensen*, P. Plubin
- C01-014 THE IMPORTANCE OF TRADITIONAL KNOWLEDGE RECOGNITION AND INVOLVEMENT INTO THE SCIENTIFIC RESEARCH.
J. Staffansson*
- C01-015 LEGAL BACKGROUND IN THE INTERNATIONAL LAW CONCERNING INDIGENOUS INTELLECTUAL PROPERTY IN THE ARCTIC
L. I. Nikanorova*
- C01-016 THE TRANSFER OF ARCTIC-BASED RESEARCH AND SCIENCE COMMUNICATION METHODS TO TROPICAL CONTEXTS
R. Fielding*

B7: Atmosphere-ocean-ice interactions and aspects related to a future, seasonally ice free Arctic Ocean

Main Convener: Bert Rudels

April 28 (Tuesday), Room 204, 10:45-12:15

Chair: Thomas Spengler, Thomas Haine

- B07-001 MULTI-DECADAL VARIABILITY IN THE ARCTIC
S. Outten*, I. Esau
- B07-002 THE COMPLEX RESPONSE OF ARCTIC AEROSOL TO SEA-ICE RETREAT

J. Browse*, K. S. Carslaw, G. W. Mann, C. E. Birch, S. R. Arnold, C. Leck

- B07-O03 ON ASSESSING THE TEMPORAL VARIABILITY OF ARCTIC ENERGY BUDGETS
L. Haimberger*, M. Mayer, M. Blaschek
- B07-O04 AUTONOMOUS INVESTIGATIONS OF MARGINAL ICE ZONE PROCESSES- CHANGING FEEDBACKS AND OBSERVATIONAL CHALLENGES
C. M. Lee*, M. Doble, S.-H. Kang, M. Wieslaw, T. Stanton, M.-L. Timmermans, J. Wilkinson
- B07-O05 TOWARDS PROCESS RESOLVING MODELING, INTEGRATED SYNTHESIS AND PREDICTION OF ARCTIC CLIMATE CHANGE
W. Maslowski*, A. Roberts, R. Osinski

April 28 (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*, C. Drüe, A. Preußner, I. Govorina
- 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
O. Persson*, M. Shupe, M. Tjernstrom, J. Sedlar, I. Brooks, B. Brooks, G. Bjork, J. Prytherch, D. Salisbury, P. Achtert, G. Sotiropoulou, P. Johnston, D. Wolfe
- 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 (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*, A. Terpstra, C. Michel
- 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 ATMOSPHERIC FORCING OF TRANSPORT OF POLAR WATER AND SEA ICE OVER THE NORTH ICELANDIC SHELF
S. Jonsson*, H. Valdimarsson
- 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 (Wednesday), Room 204, 10:45-12:15

Chair: Agnieszka Beszczynska-Möller, 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

April 29 (Wednesday), Room 204, 13:45-15:15

Chair: Michael Spall, Craig Lee

- B07-O22 UPPER 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
R. Krishfield*, A. Proshutinsky, B. Williams, K. Tateyama, M. L. Timmermans, J. Toole
- 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 (Wednesday), Room 204, 15:45-17:15

Chair: Bert Rudels, Wieslaw Maslowski

- B07-O27 ROLES OF DIFFERENT FACTORS IN SHAPPING 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 FUTURE CHANGES IN THE ARCTIC OCEAN BIOGEOCHEMISTRY IN CMIP5 PROJECTIONS WITH MPI-ESM
T. Ilyina*, K. Six, J. Jungclaus

C5: Advances in Transdisciplinary Arctic Research: Progress on Building Collaborative Agendas for Research Supporting Solutions for Sustainability

Main Convener: Carolina Cavazos Guerra

April 30 (Thursday), Room 204, 10:45-12:15

- C05-O01 REINDEER HERDING AND NORTHERN ECOSYSTEMS UNDER WARMING CLIMATE
J. Kayhko*, L. Oksanen, T. Horstkotte, S. Kivinen, B. Forbes, B. Johansen
- 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 (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: Volker Rachold, Tatiana Vlasova, Gunn-Britt Retter