



INTAROS Annual meeting week 7 – 11 January 2019

<http://intaros.eu>
<https://intaros.nersc.no>

Hosted by University of Bremen
Haus der Wissenschaft
Sandstrasse 4/5
28195 Bremen, Germany
<https://www.hausderwissenschaft.de/English.html>

Monday 07 January 2019

1300-1500: WP2 Workshop: results of data assessment, data exploitation and modelling-assessed gap analysis (separate agenda on page 6-7)
1500-1530: Coffee break
1530-1800: WP2 Workshop (cont.)
1800-1830: Ice Breaker

Tuesday 08 January 2019

0900-1030: WP2 workshop (cont.)
1030-1100: Coffee break
1100-1230: WP2 workshop (cont.)
1230-1400: Lunch (in near-by restaurants)
1400-1530: WP6: Application of iAOS towards stakeholders. Parallel planning meetings in each of the tasks
1530-1600: Coffee break
1600-1615: The Ocean Best Practices system, presentation by Pier Luigi Buttigieg
1615-1800: Parallel planning meetings in the tasks (WP6 and WP3)

Wednesday 09 January 2019: General Assembly

0830-0900: Arrival
0900-0930: Introduction and WP1: Requirements and strategy for Pan-Arctic observing systems, including outcome of the first period review: S. Sandven
0930-1030: WP2: Exploitation of existing observing systems: results and further work

- Overview: R. Pirazzini
- Atmosphere presentation: M. Tjernström
- Ocean and sea ice presentation: I. Schewe
- Terrestrial presentation: A. Ahlström

1030-1100: Coffee break

1100-1200: WP3: Enhancement of multidisciplinary in situ observing systems: results and further work

- Introduction (A. Beszczynska-Möller)
- Greenland (A. Ahlström)
- North of Svalbard (T. Johannessen)
- Fram Strait (T. Soltwedel)
- Distributed ocean and sea ice systems (A. Beszczynska-Möller)
- Distributed atmospheric and land systems (M. Göckede)

1200-1230: WP4: Enhance community-based observing programmes: results and further work (F. Danielsen/L. Iversen)

1230-1400: Lunch (in near-by restaurants)

1400-1500: WP5: Data integration and management: results and further work

- iAOS cloud platform - TDUE (Pedro) 15 min
- Integration of data repositories - AWI (Ingo) 15 min
- iAOS Portal and Data catalogue - NERSC (Torill) 15 min
- Geostatistics service (+PR for training course) - ARMINE (Fabien/Didier) 10 m
- Conclusion - TDUE (Pedro) 5 min

1500-1545: WP6: Applications of iAOS towards stakeholders: workplan for each task (G.Ottersen/M.Sejr)

1545-1600: Coffee break

1600-1630: WP7: Dissemination and outreach: results and further work (D.Zona/R. Higgins)

1630-1745: Presentations of INTAROS work in USA, Canada, Russia, China and Korea

- Hajo Eicken, University of Alaska, USA (15 min)
- Kim Juniper, Ocean Network Canada (15 min)
- Nikolai Mikhailov, RIHMI-WDC, Russia (15 min)
- Yubao Qiu, RADI, China (15 min)
- Hyun-cheol Kim, KOPRI, Korea (15 min)

1745-1800: Arctic cluster project: APPLICATE (Luisa Cristini, AWI)

1900: Conference dinner in Atlantic Grand Hotel (non-hosted)

Thursday 10 January 2019

0900-1030: WP4 Workshop: Results and further work on CBM

0900-1030: WP5 Workshop: Practical data delivery to the project

1030-1100: Coffee break

1100-1230: WP7 Workshop – how to increase dissemination and outreach work

1230-1400: Lunch (in near-by restaurants)

1400-1530: Training session: RGeostats (see page 4)

1400-1530: Advisory Panel meeting

1530-1600: Coffee break

1600-1730: Training session: RGeostats

1600-1730: Advisory Panel meeting

Friday 11 January 2019

0900-1030: Training session: RGeostats

0900-1030: Steering Committee meeting

1030-1100: Coffee break

1100-1230: Training session: RGeostats (cont)

1100-1230: Steering Committee meeting (cont)

1230-1400: Lunch (in near-by restaurants)

1400-1600: Training session: RGeostats

1400-1600: Steering Committee meeting (cont)

Workshop on Data Delivery, Thursday 10 January 0900 – 1030

- From Data Collection to Long-Term Preservation and Use: Arctic data as part of a global system (NSIDC, Peter L. Pulsifer; NERSC, Torill Hamre) 10 min
- OpenDAP Use Cases - how-to essentials (Terradue, Hervé Caumont) 10 min
- Example for querying a remote OpenDAP server for Sea-Ice data-collections (UB, Georg Heygster/ Terradue) 10 min
- Data integration via IMR data model (IMR, Arnfinn Morvik / ARMINES, Fabien Ors) 10 min
- Tools for data-mining in an online-repository (AWI/ PANGAEA, Ingo Schewe) 10 min
- Using Geoserver to provide gridded datasets to iAOS (FMI, Mwaba Hiltunen) 10 min
- Technical basic requirement for a successful integration of a remote data server to the iAOS (Pedro Goncalves) 10 min
- Discussion and Q&A session 20 min

WP7 Workshop on dissemination and outreach, Thursday 10 January 1100 - 1230

We strongly encourage all WP leaders and key contributors to participate in the WP7 workshop as it will shape how we promote the project going forward. The workshop aims to build on the work done on communications of field work 2018 in preparation for the coming year. During the WP7 workshop we will work in small groups to complete guided interactive exercises to improve "Messaging" and better identify appropriate messages for specific "Target audiences". We will also explore the topic of "Language", through a fun online game where participants will be asked to "translate" their scientific message into more simple language. Finally, we will discuss how different team members can contribute to dissemination, and help identify representatives from each workpackage to contribute regularly to social media and other dissemination."

RGeostats Workshop

to review geostatistical tools for INTAROS

By Didier Renard and Fabien Ors, ARMINES

Dates:

Thursday 10th PM + Friday 11th (all day)

Purpose:

Train the INTAROS partners to use geostatistical techniques for processing their data products

Goal:

Understand geostatistical methods and perform hands-on exercises to get familiar with the geostatistical tools available in the RGeostats package

Expected audience:

INTAROS WP6 partners and any additional interested partner

Expected outcome:

Provide INTAROS partners with a first experience to use RGeostats in their applications

Description:

Geostatistics has now gained momentum and is commonly applied in domains as diverse as Mining, Oil & Gas, Air, Water and Soil quality monitoring and many other fields. Geostatistics provides a powerful and flexible suite of procedures to analyze and map almost any type of spatial data. It also provides sound techniques for uncertainty evaluation and risk assessment. The team of Geostatistics of MINES ParisTech (formerly headed by Prof. G. Matheron) has decided to help disseminating the theory by producing the package [RGeostats](#) under the R platform.

This workshop gives an opportunity for INTAROS partners to review the main concepts of Geostatistics and put them in practice by applying RGeostats procedures on some geophysical datasets.

Outline:

- 1) The variogram and its extension (variogram cloud, variogram map) and the model selection (fitting procedures)
- 2) Estimation using an optimal linear predictor: kriging and its extensions (cross-validation). Neighborhood specification
- 3) Multivariate geostatistics. Bivariate statistics and multivariate spatial tools (cross-variogram). Linear model of coregionalization. Multivariate estimation technique (co-kriging) and its extensions (external drift concept)
- 4) Simulations. Spatial law and Gaussian random function (anamorphosis). Turning bands algorithm

WP2 workshop, 7-8 January 2018

Monday 7 January: presentations of partner's work in WP2

13:00-13:15 introduction by WP2 leaders (purpose of the workshop, and role of WP2 activities in INTAROS)

13:15-14:45 presentations on ocean and sea ice (chair: Ingo Schewe)

14:45-15:00 presentations on atmosphere (chair: Michael Tjernström)

15:00-15:30 coffee break

15:30-16:05 presentations on atmosphere (continue)

16:05-16:30 presentations on land and terrestrial cryosphere (chair: Andreas Ahlstrøm)

16:30-16:45 break

16:45-18:00 presentations on land and terrestrial cryosphere (continue)

Partner	Data assessment	Data exploitation	Modelling-assessed gaps
Ocean and sea ice (AWI collects slides) 1 hr30min			
NERSC	5 min	5 min	
IMR	5 min		
AWI	5 min	5 min	
IOPAN	3 min	2 min	
DTU	5 min	5 min	
AU	3 min	2 min	
IFREMER	5 min	5 min	
UB	5 min	5 min	
UNIS	3 min	2 min	
NIVA	5 min	5 min	
UHAM			10 min
Atmosphere (MISU collects slides) 50 min			
MISU	5 min		
FMI	5 min	5 min	10 min
SMHI	5 min		
U Helsinki	3 min	2 min	
GEUS	5 min		
UIB	5 min		
UB		5 min	
Land and terrestrial cryosphere (GEUS collects the slides) 1h 40min			
GEUS	5 min	5 min	
MPG	5 min		10 min
USFD	5 min		
GFZ	5 min	5 min	
UPM	5 min	5 min	
UIB	2 min	3 min	
DTU	5 min	5 min	
U Exeter	5 min		
FMI	5 min	5 min	
SMHI	5 min	5 min	
IGPAN	3 min	2 min	
U Slaski	3 min	2 min	

Tuesday 8 January:

9:00-9:30: Overview on Task 2.3: the **Data Catalogue** (Torill Hamre) and challenges related to data provision to iAOS: discussion (chair: Ingo Schewe)

9:30-10:15: content of D2.10 "**Report on synthesis and recommendation from WP2**": discussion with all theme leaders (chair: Michael Tjernström)

- Synthesis by theme?
- Gap between observers and data management
- Stakeholders: role of DNV GL and EuroGOOS + atmospheric stakeholder?
- Peer-reviewed paper(s), e.g. BAMS, Frontiers...?

10:15-10:45: content of D2.11 "**Report on the maturity scores of existing observing systems in the Arctic**": report on work done (Elena Zakharova) and discussion (chair: Roberta Pirazzini)

10:45-11:00: Coffee break

11:00-11:20: **ArcticMap**: complementary to / continuation of INTAROS WP2 (Torill Hamre, Hanne Sagen)

11:20 – 12:20: Discussion on the extension of the assessment outside the INTAROS consortium, and iAOS access/link to the main Arctic data repositories (chair: Roberta Pirazzini)

- Discussion track:
 - Who should be contacted
 - How to engage people in filling the questionnaires
 - How do we handle the answers
- IASOA: there is not any other way to get a large amount of Arctic atmospheric data into the iAOS than via IASOA. Report on the meeting in FMI with Taneil Uttal (Roberta Pirazzini)

12:20-12:30: Concluding remarks

12:30-14:00: lunch

Room plan: Monday 07 – Friday 11 January, with registered number of participants*

Room	Olbers Saal		Kleiner Saal		Sitzungsraum OG	
Capacity:	150 persons		50 persons		20 persons (tables), 35 (without tables)	
Monday PM			WP2 Workshop	45		
Tuesday AM					available	
Tuesday 1400-1530			WP6 task 6.2+6.8 meeting + task 6.4 meeting	18	WP6 task 6.3+6.7 meeting	23
1600-1615			Ocean Best Practices			
1615-1800			Other WP6 task meetings	27	WP3 task meeting Task 3.1 meeting	27
Wednesday AM	General	80	Coffee breaks			
Wednesday PM	Assembly		Coffee breaks			
Thursday 0900-1030	Practical data delivery workshop	56	Coffee breaks		WP4 workshop on results and next step	
1100-1230	WP7 workshop on dissemination	40			available	
Thursday 1400-1530	RGeostats training	27	Coffee breaks		Advisory panel	5+
Thursday 1600-1730	RGeostats training	27			Advisory panel	5+
Friday AM			Steering Committee	22	RGeostats training	21
Friday PM			Steering Committee	22	RGeostats training	21

* Registered by 19 Dec.

Participants - INTAROS general Assembly Week, 7-11 Jan 2019

Surname	First name	E-mail address	Affiliation
Smolyanitsky	Vasily	vms@aari.aq	<i>Arctic and Antarctic Research Institute</i>
Reiersen	Lars-Otto	lor@arcticknowledge.no	<i>Arctic Knowledge</i>
ORS	Fabien	fabien.ors@mines-paristech.fr	ARMINES-ASSOCIATION POUR LA RECHERCHE ET LE DEVELOPPEMENT DES METHODES ET PROCESSUS INDUSTRIELS
RENARD	Didier	didier.renard@mines-paristech.fr	ARMINES-ASSOCIATION POUR LA RECHERCHE ET LE DEVELOPPEMENT DES METHODES ET PROCESSUS INDUSTRIELS
Wackernagel	Hans	hwackernagel@gmail.com	ARMINES-ASSOCIATION POUR LA RECHERCHE ET LE DEVELOPPEMENT DES METHODES ET PROCESSUS INDUSTRIELS
Maar	Marie	mam@bios.au.dk	AU - AARHUS UNIVERSITET
Sejr	Mikael	mse@bios.au.dk	AU - AARHUS UNIVERSITET
Ørberg	Sarah	sao@bios.au.dk	AU - AARHUS UNIVERSITET
Schewe	Ingo	ingo.schewe@awi.de	AWI - ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG
Hasemann	Christiane	Christiane.Hasemann@awi.de	AWI - ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG
Soltwedel	Thomas	Thomas.Soltwedel@awi.de	AWI - ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG
Behrendt	Axel	Axel.Behrendt@awi.de	AWI - ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG
Biebow	Nicole	nicole.biebow@awi.de	AWI - ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG
Willmott	Veronica	veronica.willmott@awi.de	AWI - ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG
Cristini	Luisa	luisa.cristini@awi.de	AWI - ALFRED-WEGENER-INSTITUT HELMHOLTZ- ZENTRUM FUER POLAR- UND MEERESFORSCHUNG
Ortega	Pablo	pablo.ortega@bsc.es	BSC - BARCELONA SUPERCOMPUTING CENTER - CENTRO NACIONAL DE SUPERCOMPUTACION
Domine	Florent	florent.domine@gmail.com	CNRS - CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE
Houssais	Marie-Noelle	mnh@locean-ipsl.upmc.fr	CNRS - CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE
Herbaut	Christophe	ch@locean-ipsl.upmc.fr	CNRS - CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE
Brude	Odd Willy	odd.willy.brude@dnvgl.com	DNV GL AS
Aarnes	Øivin	oivin.aarnes@dnvgl.com	DNV GL AS
Khan	Shfaqat	abbas@space.dtu.dk	DTU - DANMARKS TEKNISKE UNIVERSITET
Ludwigsen	Carsten	caanlu@space.dtu.dk	DTU - DANMARKS TEKNISKE UNIVERSITET
Andersen	Ole	oa@space.dtu.dk	DTU - DANMARKS TEKNISKE UNIVERSITET
Christensen	Asbjørn	asc@aquaa.dtu.dk	DTU - DANMARKS TEKNISKE UNIVERSITET
Nielsen	karina	karni@space.dtu.dk	DTU - DANMARKS TEKNISKE UNIVERSITET
Sá	Sandra	sandra.sa@eurocean.org	EUROCEAN
Higgins	Ruth	ruth.higgins@eurocean.org	EUROCEAN
Buch	Erik	erik.buch@eurogoos.eu	EUROGOOS AISBL
Pirazzini	Roberta	roberta.pirazzini@fmi.fi	FMI - ILMATIETEEEN LAITOS
Hiltunen	Mwaba	mwaba.hiltunen@fmi.fi	FMI - ILMATIETEEEN LAITOS
Voss	Peter	pv@geus.dk	GEUS - Geological Survey of Denmark and Greenland
Funck	Thomas	tf@geus.dk	GEUS - Geological Survey of Denmark and Greenland
Mankoff	Kenneth	kdm@geus.dk	GEUS - Geological Survey of Denmark and Greenland
Solgaard	Anne	aso@geus.dk	GEUS - Geological Survey of Denmark and Greenland
Ahlstrøm	Andreas	apa@geus.dk	GEUS - Geological Survey of Denmark and Greenland
Sachs	Torsten	torsten.sachs@gfz-potsdam.de	GFZ - HELMHOLTZ ZENTRUM POTSDAM DEUTSCHES GEOFORSCHUNGSZENTRUM
Ardhuin	Fanny	fanny.ardhuin@ifremer.fr	IFREMER
Glowacki	Piotr	glowacki@igf.edu.pl	IGPAN - Instytut Geofizyki Polskiej Akademii Nauk
van der Meeren	Gro I.	GroM@hi.no	IMR - HAVFORSKNINGSINSTITUTTET
Morvik	Arnfinn	arnfinn.morvik@hi.no	IMR - HAVFORSKNINGSINSTITUTTET
Ottersen	Geir	geir.ottersen@ibv.uio.no	IMR - HAVFORSKNINGSINSTITUTTET
Hansen	Cecilie	cecilie.hansen@hi.no	IMR - HAVFORSKNINGSINSTITUTTET
Skogen	Morten D	morten@imr.no	IMR - HAVFORSKNINGSINSTITUTTET

Beszczynska-Möller	Agnieszka	abesz@iopan.gda.pl	IO PAN- INSTYTUT OCEANOLOGII POLSKIEJ AKADEMII NAUK
Walczowski	Waldemar	walczows@iopan.pl	IO PAN- INSTYTUT OCEANOLOGII POLSKIEJ AKADEMII NAUK
Grynczel	Agata	grynczel@iopan.gda.pl	IO PAN- INSTYTUT OCEANOLOGII POLSKIEJ AKADEMII NAUK
Hyun-cheol	Kim	kimhc@kopri.re.kr	KOPRI - KOREA OCEAN RESEARCH AND DEVELOPMENT INSTITUTE
Johansson	Margareta	margareta.johansson@nateko.lu.se	Lund University/INTERACT
Tjernström	Michael	michaelt@misu.su.se	MISU - STOCKHOLMS UNIVERSITET
Goeckede	Mathias	mgoeck@bgc-jena.mpg.de	MPG - MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN EV
Pallandt	Martijn	mpall@bgc-jena.mpg.de	MPG - MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN EV
Sandven	Stein	stein.sandven@nersc.no	NERSC - STIFTELSEN NANSEN SENTER FOR MILJOOG FJERNMALING
Lygre	Kjetil	kjetil.lygre@nersc.no	NERSC - STIFTELSEN NANSEN SENTER FOR MILJOOG FJERNMALING
Iversen	Lisbeth	lisbeth.iversen@nersc.no	NERSC - STIFTELSEN NANSEN SENTER FOR MILJOOG FJERNMALING
Sagen	Hanne	hanne.sagen@nersc.no	NERSC - STIFTELSEN NANSEN SENTER FOR MILJOOG FJERNMALING
Hamre	Torill	torill.hamre@nersc.no	NERSC - STIFTELSEN NANSEN SENTER FOR MILJOOG FJERNMALING
Shalina	Elena	elena.shalina@niersc.spb.ru	<i>NIERSC-Scientific foundation Nansen International Environmental and Remote Sensing Centre</i>
Bobylev	Leonid	leonid.bobylev@niersc.spb.ru	<i>NIERSC-Scientific foundation Nansen International Environmental and Remote Sensing Centre</i>
King	Andrew	andrew.king@niva.no	NIVA - NORSK INSTITUTT FOR VANNFORSKNING
Danielsen	Finn	fd@nordeco.dk	NORDECO-NORDISK FOND FOR MILJØ OG UDVIKLING
Storvold	Rune	rune.storvold@norut.no	NORUT NORTHERN RESEARCH INSTITUTE AS
Pulsifer	Peter L	peterpulsifer@gmail.com	<i>NSDIC / CIRES, University of Colorado</i>
Zakharova	Elena	zavocado@gmail.com	NUIM - NATIONAL UNIVERSITY OF IRELAND MAYNOOTH
Juniper	Kim	kjuniper@uvic.ca	<i>OCN - Ocean Networks Canada Society</i>
Yubao	Qiu	qiuyb@radi.ac.cn	<i>RADI CAS -Institute of Remote Sensing and Digital Earth - Chinese Academy of Science</i>
Mikhailov	Nikolai	nodc@meteo.ru	<i>RHMI - ALL-RUSSIAN RESEARCH INSTITUTE OF HYDROMETEOROLOGICAL INFORMATION-WORLD DATA CENTRE</i>
Devasthale	Abhay	abhay.devasthale@smhi.se	SMHI - SVERIGES METEOROLOGISKA OCH HYDROLOGISKA INSTITUT
Gustafsson	David	david.gustafsson@smhi.se	SMHI - SVERIGES METEOROLOGISKA OCH HYDROLOGISKA INSTITUT
Döscher	Ralf	ralf.doescher@smhi.se	SMHI - SVERIGES METEOROLOGISKA OCH HYDROLOGISKA INSTITUT
Goncalves	Pedro	pedro.goncalves@terradue.com	TDUE - TERRADUE SRL
CAUMONT	Hervé	herve.caumont@terradue.com	TDUE - TERRADUE SRL
Lappalainen	Hanna	hanna.k.lappalainen@helsinki.fi	U Hels- HELSINGIN YLIOPISTO
Grabiec	Mariusz	mariusz.grabiec@us.edu.pl	U Slas- UNIWERSYTET SLASKI
Eicken	Hajo	heicken@alaska.edu	<i>UAF - University of Alaska</i>
Heygster	Georg	heygster@uni-bremen.de	UB - UNIVERSITAET BREMEN
Stammer	Detlef	detlef.stammer@uni-hamburg.de	UHAM - UNIVERSITAET HAMBURG
Lyu	Guokun	guokun.lyu@uni-hamburg.de	UHAM - UNIVERSITAET HAMBURG
Johannessen	Truls	truls.johannessen@uib.no	UiB - Universitetet i Bergen
Sørensen	Mathilde B	mathilde.sorensen@uib.no	UiB - Universitetet i Bergen
Jeddi	Zeinab	zeinab.jeddi@uib.no	UiB - Universitetet i Bergen
Touzeau	Alexandra	alexandra.touzeau@uib.no	UiB - Universitetet i Bergen
Roden	Nick	nicholas.roden@uib.no	UiB - Universitetet i Bergen
Navarro	Francisco	francisco.navarro@upm.es	UPM - UNIVERSIDAD POLITECNICA DE MADRID
Chotiros	Nicholas	nicholas.p.chotiros.civ@mail.mil	<i>US Office of Naval Research Global</i>
Zona	Donatella	D.zona@sheffield.ac.uk	USFD - THE UNIVERSITY OF SHEFFIELD
Quegan	Shaun	s.quegan@sheffield.ac.uk	USFD - THE UNIVERSITY OF SHEFFIELD