Welcome to the EU Polar Cluster – a collaboration of Arctic and Antarctic projects funded by the European Commission

The EU Polar Cluster is a network of collaborative polar projects funded by the European Commission, and two permanent members, the EPB and SIOS. We have a range of Arctic, Antarctic and Southern Ocean, and Polar projects. Projects that have ended still provide input to the Cluster, and we include them here to support the legacy of these projects.

The Cluster thus merges a broad spectrum of research and coordination activities – ranging from the most up-to-date findings on permafrost and sea ice, from enhancing observation to improving predictions, and from networking research stations to coordinating access to icebreakers.

Our objective is to bring the insights from our various areas of expertise together in order to provide one entry point to EU funded Polar research. Jointly we are aiming at providing policy-relevant information and supporting the EU in implementing its integrated policy for the Arctic.

How do we do this? In fostering international cooperation, in reporting on the impacts of climate change on the Arctic's fragile environment, in promoting sustainable development and in cooperating with policy makers, indigenous peoples and local communities, business and NGO representatives and other societal actors.

More information:

www.polarcluster.eu

@EUPolarCluster

www.facebook.com/groups/eupolarcluster

www.polarcluster.eu

Mission of the EU Polar Cluster

- To connect EU Polar Cluster Members, further developing the European polar research, observation, infrastructure and/or modelling community network.
- To organise joint activities by Cluster Members for greater impact than possible individually, while minimising duplication, sharing workload, and avoiding stakeholder fatigue.
- To support the sustainability and accessibility of large-scale EU-funded Polar projects' selected legacy outputs after their official end.
- To share advice and best practices among EU Polar Cluster Members.
- To promote the European polar research community, especially the strength, excellence, integration and best practices of EU-funded polar research.
- To provide a single contact point to all EU Polar Cluster Members for external partners and stakeholders, including Indigenous and local communities.

Added value of clustering activities

- Higher impacts than single project's outputs
- Upscale collective projects' efforts
- Increased knowledge sharing
- Less but better engagement with stakeholders
- Greater visibility
- Better use of citizen's money

Current Members

The EU Polar Cluster consists of **two permanent organisations**, the European Polar Board (EPB), the Svalbard Integrated Observing System (SIOS), and European Commission funded polar collaborative projects. There are currently **20 current projects**, and **6 previous projects** that are now completed are included to maintain legacy and access to the results and outcomes from this work.

Arctic

ARCOS

ARCSAR

Arctic PASSION

ArcticHubs

ARICE

CARPARDUS

CHARTER

ECOTIP

FACE-IT

INTERACT

JUSTNORTH

Nunataryuk

Antarctic

Beyond EPICA

SO-CHIC

TiPACCs

Polar

CRiceS

EU-PolarNet 2

FORCeS

PolarRES

PROTECT

Permanent Members

EPB

SIOS

Ended projects

ICE-ARC

KEPLER

Blue Action

APPLICATE

INTAROS

iCUPE

ARCOS

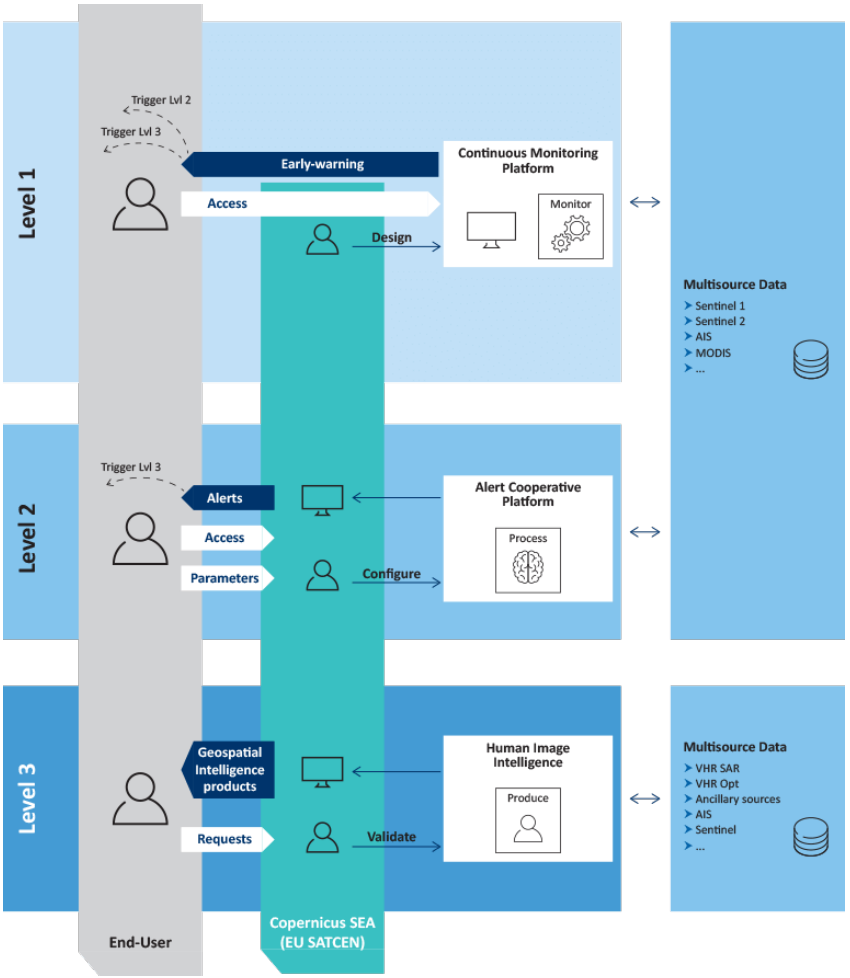
ARCOS: ARCtic Observatory for Copernicus SEA Security Service

The goal of the ARCOS project is to design and implement an early-warning system named ARCOS (Arctic Observatory for Copernicus SEA Service) providing continuous monitoring of the Arctic region. Designed to generate actionable products in the security domain by processing and fusing multi-sensor data, the ARCOS system integrates available information from space, non-space sources and products available from Copernicus Services such as the Copernicus Marine Environment Monitoring Service (CMEMS) and the Copernicus Climate Change Service (C3S).

Objectives/Mission

The specific objectives of the project are to:

1. Develop a mechanism for pro-active intelligence generation based on an early warning system
2. Resolve the main technological challenges resulting from the large amount of data processed
3. Resolve and exploit the challenges and opportunities due to the Arctic extreme latitude
4. Develop an operational and scalable prototype of a web mapping platform
5. Demonstrate the operational use of EO based intelligence relevant to the Arctic region
6. Produce a roadmap for its transition into operations of the Copernicus SEA Service



Key facts

Start	01/12/2020	**Project Coordinator**	Massimo Sernicola
End	31/05/2023	**Project Manager**	Marco Corsi
EU Contribution	€1,498,061	**Coordinating Organisation**	e-GEOS
Grant No:	101004372	**Consortium**	7 Partners

Website: www.arcos-project.eu/

Social media: @ArcosH2020 https://www.linkedin.com/groups/9014222/

ARCSAR

ARCSAR: Arctic and North Atlantic Security & Emergency Preparedness Network

Innovation platforms for Arctic and North Atlantic security: The provision of new research and innovation programmes contribute substantially to successful interactions between security and emergency response institutions in the Arctic and the North Atlantic (ANA). In this context, the EU-funded ARCSAR project aims to establish international best practice and propose innovation platforms within safety and security in the focus region.

The project will advise on their integration and promote the industrialisation of results. The project will map innovations that could address capability issues and other gaps in order to improve performance, and designate priorities as regards common capabilities demanding additional standardisation. ARCSAR will study whether more measures are needed to respond to composite challenges, including proper situational awareness, emergency response capability in search and rescue (SAR), environmental protection, and other security threats.

Objectives/Mission

The ARCSAR project aims to establish international best practice and propose innovation platforms for the professional security and emergency response institutions in the Arctic and the North-Atlantic. The focus is on cross-border cooperation and increased interaction between various networks of emergency preparedness and response authorities, industry groups, academia, innovators, high-level forums, voluntary organizations, and local communities. The overarching goal is to increase safety in the ANA region and develop competence of the practitioners and professional security and emergency response institutions through workshops, joint exercises, innovative platforms, and stakeholder events.

The ARCSAR project will monitor research and innovation projects, map the prevailing challenges for search and rescue (SAR), environmental protection, and security in the ANA region, express common requirements as regards innovations that could fill in capability and other gaps, recommend uptake of results, and indicate priorities for targeted topics requiring more standardization or policy.

Key facts

Start	01/09/2018	**Project Coordinator**	Tore Wangsfjord
End	29/02/2024	**Project Manager**	Emmi Ikonen
EU Contribution	€3,492,021	**Coordinating Organisation**	Joint Rescue Coordination Centre North Norway
Grant No:	786571	**Consortium**	21 Partners

Website: www.arcsar.eu/

Social media: @ARCSARNETWORK arcsarnetwork

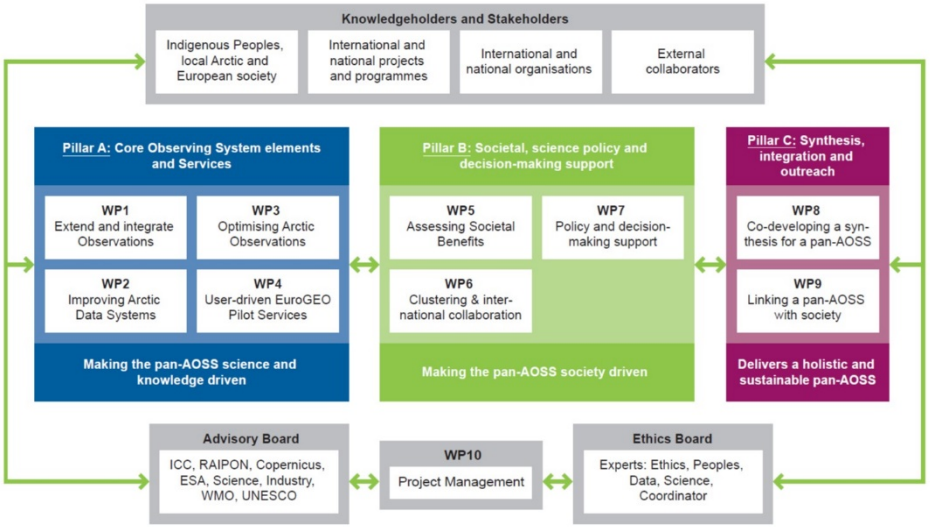
Arctic PASSION

Arctic PASSION: Pan-Arctic Observing System of Systems

The Arctic is more affected by climate warming than any other region. To monitor the ongoing changes, to predict the evolution of the climate system and to develop mitigation measures, we need a coherent system of Earth Observation.

Objectives/Mission

Innovative pan-Arctic observation: The key motivation for the EU-funded Arctic PASSION project is the co-creation and implementation of a coherent, integrated Arctic observing system: the Pan-Arctic Observing System of Systems - pan-AOSS. It aims to overcome shortcomings in the present observing system by refining its operability, improving and extending pan-Arctic scientific and community-based monitoring and the integration with indigenous and local knowledge. The project will streamline the access and interoperability of Arctic data systems and services, improve the economic viability and sustainability of the observing system, while working with the Sustaining Arctic Observing Networks (SAON), Copernicus, GEO and other international programmes. Arctic PASSION will also co-create eight new EuroGEO pilot services serving Arctic rights holders and stakeholders, science, and policy.



Key facts

Start	July 2021	**Project Coordinator**	Michael Karcher
End	June 2025	**Project Manager**	Luisa Cristini
EU Contribution	€14 998 301	**Coordinating Organisation**	Alfred Wegener Institute
Grant No:	101003472	**Consortium**	33 Partners

Website:

www.arcticpassion.eu/

Social media:

@arctic_passion arcticpassion @arctic_passion

ArcticHubs

Global drives, local consequences: Tools for global change adaptation & sustainable development of industrial and cultural Arctic "hubs"

The Arctic today faces extraordinary pressures, with globalisation and climate change combining to drive change at an unprecedented rate. The opening up of new economic sectors, including mining and mass tourism, alongside the industrialisation of many traditional livelihoods, such as fishing and forestry, are driving land use conflicts between competing sectors, and producing profound transformations on lives and communities at the economic, socio-cultural, political and environmental levels.

The ArcticHubs Project is an ambitious, multi-disciplinary international collaboration that aims to develop research-led, practice-based solutions to the urgent challenges faced in the Arctic.

Objectives/Mission

At the heart of the project's pioneering approach are the 22 'hubs' – representative locations across the Arctic, where participatory and collaborative methodologies will be employed to observe the impacts of economic activities, and to build solution-orientated tools for reconciling new economic opportunities with traditional livelihoods and solving land-use conflicts between different sectors.

The ArcticHubs project will work with local, national, regional and global stakeholders, including Arctic communities, industrial stakeholders, policy makers and others, to make a major contribution to the long-term sustainability and resilience of the region – its environment, communities, and new and existing industries and livelihoods.

Key outputs of the project will include tools for building collaborative and consensual approaches to land and resource use. Tools such as public participatory geographical information systems, guidelines for 'social licence to operate', and the building of future scenarios for the Arctic, will be trialled and implemented in collaboration with stakeholders in the 22 hubs. In addition to 'fish farming', 'forestry', 'tourism', 'mining' and 'indigenous' hubs inside the Arctic, four external 'learning' hubs, located in Canada, Austria and Italy, will provide points for comparison and control with the Arctic cases.

Key facts

Start	01/08/2020	**Project Coordinator**	Pasi Rautio
End	31/07/2024	**Project Manager**	
EU Contribution	€5,956,083	**Coordinating Organisation**	Natural Resources Institute Finland
Grant No:	869580	**Consortium**	22 Partners

Website: https://projects.luke.fi/arctichubs/

Social media: @ArcticHubs

ARICE

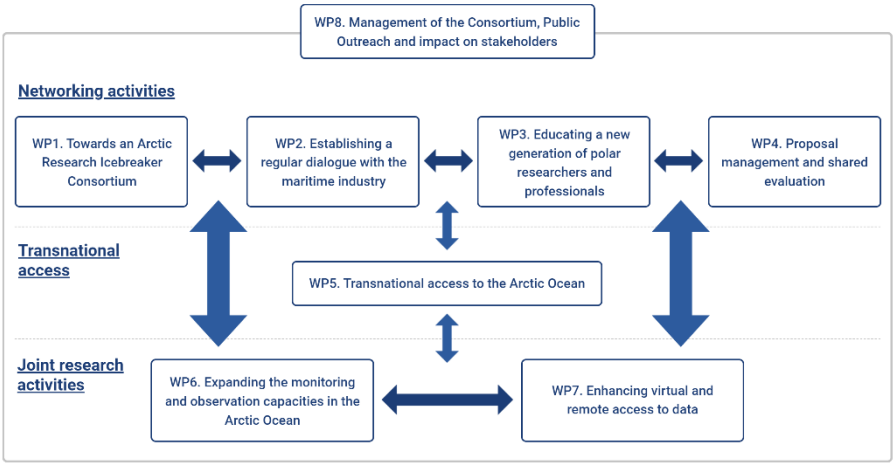
ARICE – Arctic Research Icebreaker Consortium: A strategy for meeting the needs for marine-based research in the Arctic

ARICE is a project financed by the EU HORIZON2020 RIA Research and Innovation action on the topic "Integrating Activities for Starting Communities". ARICE is an international cooperation strategy aiming at providing Europe with better capacities for marine-based research in the ice-covered Arctic Ocean.

Objectives/Mission

The recent changes of the Arctic and the increased economic activity in the region have triggered a demand for accurate sea-ice and weather predictions, for information on the status of the Arctic Ocean, and for complex predictions of future scenarios. To address these issues of particular environmental and societal concern and to develop policy recommendations for a sustainable usage of the Arctic Ocean and its resources, the Arctic science community needs world-class research icebreakers (RIs) to access the ice-covered Arctic Ocean. The current shortage of availability of RIs and a not optimally coordinated polar research fleet impedes Europe's capacity to investigate this region. There is thus an urgent need for providing European researchers with better RI capacities for the Arctic. ARICE aims at reaching this goal with the existing polar fleet by:

1. Networking: ARICE will develop strategies to ensure the optimal use of the existing polar research vessels at a European and international level, working towards an International Arctic Research Icebreaker Consortium which will share and jointly fund operational ship time on the available RIs.
2. Trans-national access (TNA):: PRV Polarstern, Germany; IB Oden, Sweden; RV Kronprins Haakon, Norway; MSV Fennica, Finland; CCGS Amundsen, Canada; RV Sikuliaq, United States of America
3. Joint research activities: ARICE will improve the RIs' services by partnering with maritime industry on a "ships and platforms of opportunity" programme and by exploring into new technologies that will lead to an improvement of ship-based and autonomous measurements in the Arctic Ocean.



Key facts

Start	01/01/2018	**Project Coordinator**	Nicole Biebow
End	31/12/2022	**Project Manager**	Veronica Willmott
EU Contribution	€ 5,996,565	**Coordinating Organisation**	Alfred Wegener Institute
Grant No:	730965	**Consortium**	15 Partners

Website:

www.arice-H2020.edu

Social media:

@Arice_Eu AriceEu

www.polarcluster.eu

BeyondEPICA

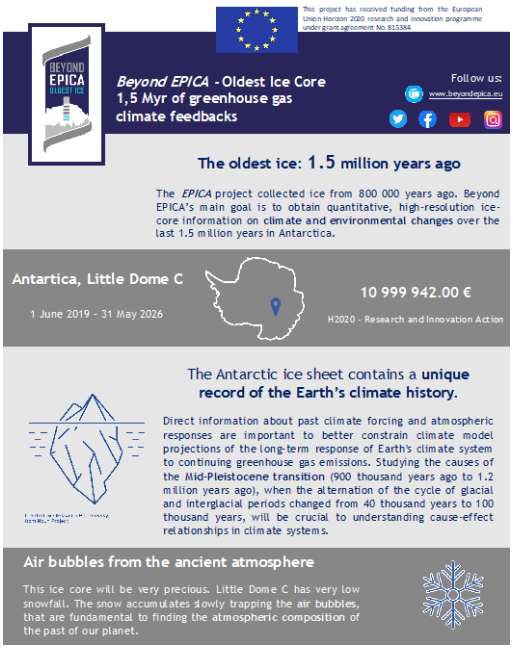
Beyond EPICA Oldest Ice Core: 1,5 Myr of greenhouse gas – climate feedbacks

Using ice-core information of the past to face climate change of the present and the future. To design effective mitigation and adaptation strategies to the current man-made climate change and improve our ability to predict future climate changes, we need to carefully study the past. The Antarctic ice sheet contains a unique record of the Earth's climate history. The air bubbles embedded in the ice preserve a record of the Earth's atmosphere through time.

Objectives/Mission

Beyond EPICA project set up a camp at Little Dome C in East Antarctica, with the aim to obtain quantitative, high-resolution ice-core information on climate and environmental changes over the last 1.5 million years. This includes a major transition in the rhythm and intensity of the ice age cycles. Its investigation is vital to understand the processes governing our climate system.

Only ice cores contain direct and quantitative information about past climate forcing and atmospheric responses. However, the longest (EPICA) ice core record available to date covers only the last 800 kyr. The RIA Topic LC-CLA-08-2018 empowers the European ice core community to perform such an oldest ice core drilling and the project 'Beyond EPICA' is taking on this unique challenge and opportunity. The overarching scientific objective driving 'Beyond EPICA' is to obtain quantitative, high-resolution ice- core information on climate and environmental changes over the last 1.5 Myr. The cause-and-effect relationship that led to the enigmatic MPT change in the climate system is not understood yet, as important information on global changes in the climate system is still missing.



Most of this information, including the phasing of these changes in the Earth System can only be derived from a continuous ice core from Antarctica covering the last 1.5 Myr. This proposal uses the planning derived during the recent BE-OI CSA, and offers an excellent team (the only team globally that could at present accept the challenge of the call), underpinned by excellent infrastructure and capacity, and is currently ensuring it has an excellent location for the core.

Key facts

Start	01/06/2019	**Project Coordinator**	Carlo Barbante
End	31/05/2026	**Project Manager**	Chiara Venier
EU Contribution	€ 10,999,942	**Coordinating Organisation**	The National Research Council (Italy)
Grant No:	815384	**Consortium**	12 Partners

Website:

www.beyondepica.eu/en/

Social media:

@OldestIce OldestIce : beyondepica_oldestice
Youtube: BeyondEPICA

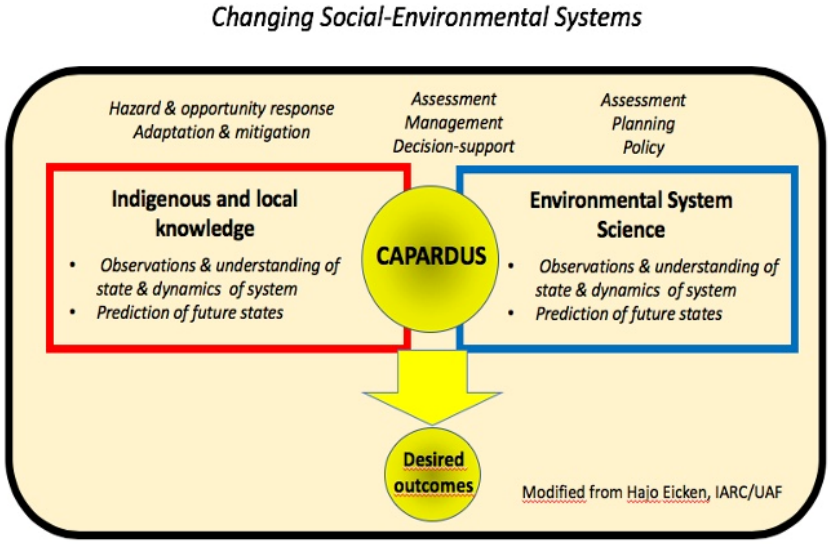
CAPARDUS

CAPARDUS: Capacity-building in Arctic standardisation development

The focus of the project is to support the development of standards, guidelines and practices for environmental protection, economic development, and other activities in the Arctic. There is growing human presence and footprint in the Arctic combined with a dramatic change in the climate and environment.

Objectives/Mission

This requires rules, regulations, guidelines, etc. which need to be adapted to local and regional conditions. There is no "standard Arctic", only a variety of highly diverse regions and communities. At present there is no framework for integrating ongoing work on standardization among Indigenous and local communities, commercial operators, and governance bodies. People living and working in the Arctic need to operate according to ethics, norms, informal agreements, conventions, guidelines, common practices, best practice, international standard, etc. These are elements of the "standardisation continuum" which need to evolve in the various Arctic regions to support the sustainable economic development, safe activities, emergency prevention and response, and improved understanding and conservation of the environment. The overall objective of the project is to establish a comprehensive framework for development, understanding and implementation of Arctic standards used by people who operate in the Arctic.



Key facts

Start	01/12/2019	**Project Coordinator**	Stein Sandven
End	30/11/2022	**Project Manager**	Hanne Sagen
EU Contribution	€2,003,009	**Coordinating Organisation**	Nansen Environmental & Remote Sensing Center (NERSC)
Grant No:	869673	**Consortium**	9 Partners

Website: www.capardus.nersc.no

Social media:

CHARTER

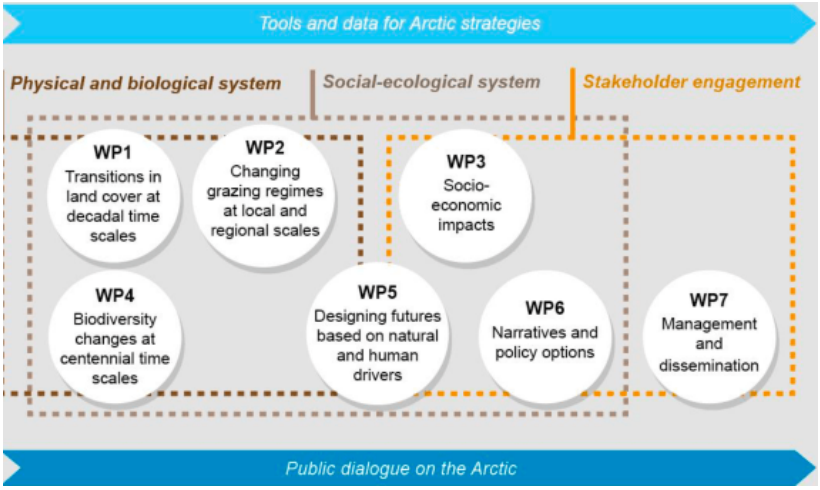
CHARTER Drivers and Feedbacks of Changes in Arctic TERrestrial Biodiversity

CHARTER grew out of a desire to better understand the processes that have been driving rapid climate and land use changes in the Arctic. The name comes from the project title: Drivers and Feedbacks of Changes in Arctic Terrestrial Biodiversity. The project started in August 2020 and will run for 4 years. CHARTER involves 21 research institutions across 9 countries. CHARTER is coordinated d by the Arctic Centre, University of Lapland..

Objectives/Mission

CHARTER works mainly in northern Europe and Northwest Russia. Changes in climate and land use affect Arctic biodiversity, as well as snow cover, sea ice and permafrost. Changes in these, in turn, have other consequences and feedbacks to Arctic regional climate.

These changes are not merely of academic interest. They are especially felt by those working on the land, such as reindeer herders. This is perhaps best demonstrated by the 2013/4 severe icing event on the world's most productive reindeer herding region of Yamal, Northwest Russia, where it is estimated that Nenets reindeer herders lost at least 61,000 reindeer, perhaps as many as one fifth of all reindeer in that region. Some herding families lost all their reindeer and have reverted to fishing in order to remain in the tundra while they attempt to rebuild their herds before another such catastrophe may strike. Poor winter grazing conditions in winter 2019/20 led to the death of as many as 15,000 reindeer in Finland, which had large financial consequences for herders along with a substantially increased workload.



Key facts

Start	01/08/2020	**Project Coordinator**	Bruce Forbes
End	31/07/2024	**Project Manager**	Sirpa Rasmus
EU Contribution	€5,900,000	**Coordinating Organisation**	University of Lapland
Grant No:	869471	**Consortium**	21 Partners

Website:

www.charter-arctic.org/

Social media:

@CharterArctic arcticcentre

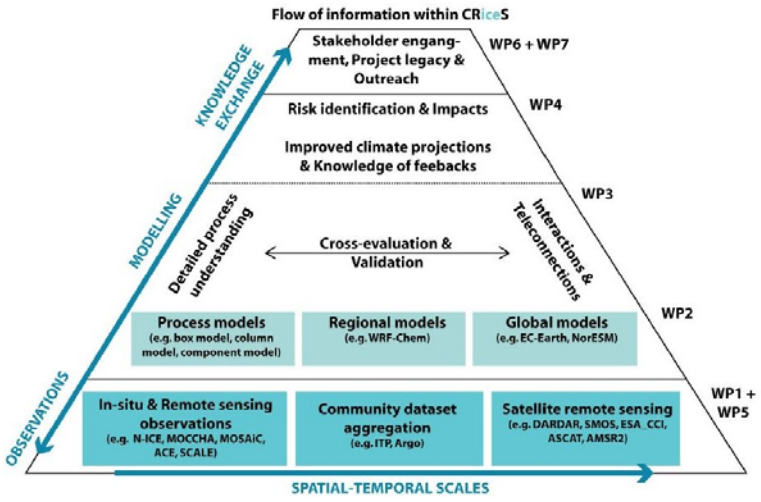
CRiceS

CRiceS: Climate Relevant interactions and feedbacks: the key role of sea ice and Snow in the polar and global climate system

Sea ice is an integral, changing part of the global Earth system. The polar climate system affects lives and livelihoods across the world by regulating climate and weather; providing ecosystem services; and regulating the ability of humans to operate (hunting, shipping, and resource extraction).

Objectives/Mission

The overarching objective of CRiceS is to deliver improved understanding of the physical, chemical, and biogeochemical interactions within the OIA system, new knowledge of polar and global climate, and enhanced ability of society to respond to climate change. The unique and broad interdisciplinary expertise within CRiceS allows us to quantify the characteristics and functioning of the OIA system in the past, present and future (across diverse timescales) and its role from regional to global spatial scales. Knowledge at these scales is essential for developing improved understanding of how OIA physical and chemical processes control polar and global climate.



Key facts

Start	01/09/2021	**Project Coordinator**	Risto Makkonen (Science Coordinator: Jennie Thomas)
End	31/08/2025	**Project Manager**	Åsa Stam
EU Contribution	€7,999,267	**Coordinating Organisation**	Finnish Meteorological Institute
Grant No:	101003826	**Consortium**	21 Partners

Website:

www.crices-h2020.eu/

Social media:

@CRiceS_H2020 LinkedIn

ECOTIP

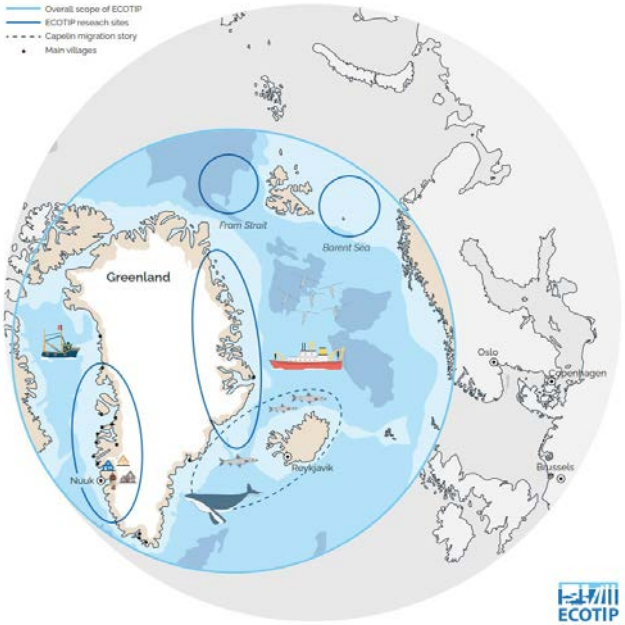
ECOTIP: Investigating Ecological Tipping Cascades in the Arctic Seas

ECOTIP is a flagship Horizon 2020 research project focusing on understanding and predicting changes in Arctic marine biodiversity and implications for two vitally important marine ecosystem services: fisheries production and carbon sequestration.

The project combines state-of-the-art field and laboratory studies, analysis of historical and paleo-oceanographic data and trait-based modelling to predict the potential tipping points of key biological ecosystem functions in Arctic seas in the face of climate change and other pressures. ECOTIP works closely with fishing communities in Greenland and other stakeholders to understand the effects of biodiversity and ecosystem changes on society, and how best to reduce, mitigate and adapt to the changes.

Objectives/Mission

- Understand how marine biodiversity in the Arctic is responding to pressure from multiple sources, including temperature, salinity, invasive species, pollution and fishing – or combinations of these.
- Improve our description of marine biodiversity and ecosystems.
- Predict the consequences of changes in plankton community composition for carbon sequestration and fisheries.
- Investigate the socio-economic consequences of biodiversity change such as distributions of key commercially important species in Greenland and evaluate adaptation options.
- Provide recommendations for developing adaptation strategies in relation to changes in Arctic ecosystems.



Key facts

Start	01/06/2020	**Project Coordinator**	Marja Koski
End	31/05/2024	**Project Manager**	Ole Henrik Haslund
EU Contribution	€6,361,536	**Coordinating Organisation**	Technical University of Denmark
Grant No:	869383	**Consortium**	15 Partners

Website:

www.ecotip-arctic.eu/

Social media:

- EcoTipArctic @ecotiparctic

For Twitter and Instagram please use #EcoTipArctic

EU-PolarNet 2

EU-PolarNet 2 – Coordinating and co-designing the European Polar Research Area

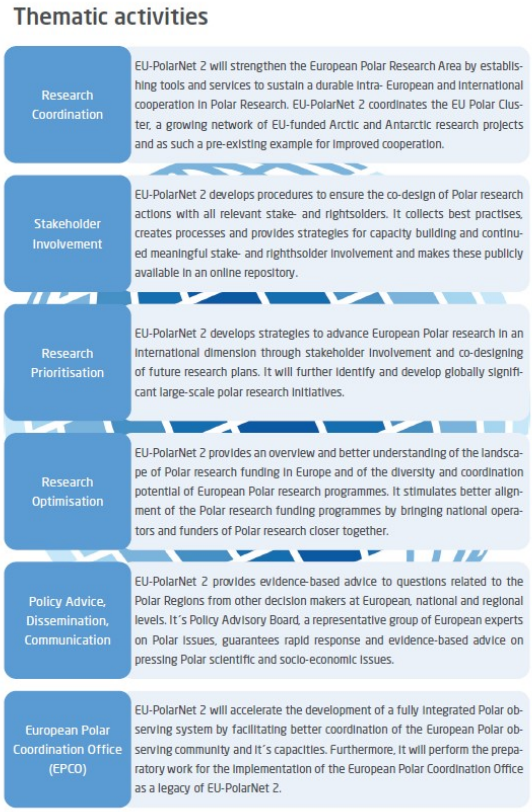
EU-PolarNet 2 is the world's largest consortium of expertise and infrastructure for Polar Research. It brings together the expertise and knowledge of 25 partners from all 21 European and Associated Countries with substantial Polar activities. EU-PolarNet 2 – "Coordinating and co-designing the European Polar Research Area" will build on EU-PolarNet 1's achievements. It will go several steps further to develop and work towards the implementation of a European Polar Research Area.

Objectives/Mission

EU-PolarNet 2 will provide a platform to further develop the coordination of Polar research actions in Europe and with overseas partners.

By involving all relevant stake- and right holders it will support the development of transdisciplinary and transnational Polar research actions of high societal relevance. To ensure that such an important platform is sustained after the four years of project duration, the project will work towards creating a permanent European Polar Coordination Office as a legacy of EU-PolarNet 2.

EU-PolarNet



Key facts

Start	01/10/2020	**Project Coordinator**	Nicole Biebow
End	30/09/2024	**Project Manager**	Anneli Strobel
EU Contribution	€3,299,234	**Coordinating Organisation**	*Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research*
Grant No:	101003766	**Consortium**	25 Partners

Website:

www.eu-polarnet.eu

Social media:

@EUPolarNet EU-PolarNet

EU-PolarNet eupolarnet EU-PolarNet

European Polar Board

European Polar Board, EPB

The EPB is an independent organisation that focuses on major European strategic priorities in both the Arctic and the Antarctic regions. Current EPB membership includes research institutes, funding agencies, scientific academies and polar operators from across Europe.

The EPB envisions a Europe with a strong and cohesive polar research community and wherein decisions affecting or affected by the Polar Regions are informed by independent, accurate, and timely advice.

Objectives/Mission

The EPB has a mission to improve European coordination of Arctic and Antarctic research, by optimising the use of European polar research infrastructures. We promote multilateral collaborations between our Members and provide a single contact point for the global polar community. We advance the collective knowledge of polar issues, particularly in the context of European societal relevance.

Key facts

Start	1995	**Project Coordinator**	Renuka Badhe
End	n/a	**Project Manager**	Joseph Nolan
EU Contribution	€	**Coordinating Organisation**	EPB
Grant No:	n/a	**Consortium**	n/a

Website:

www.europeanpolarboard.org

Social media:

@EUPolarBoard EuropeanPolarBoard

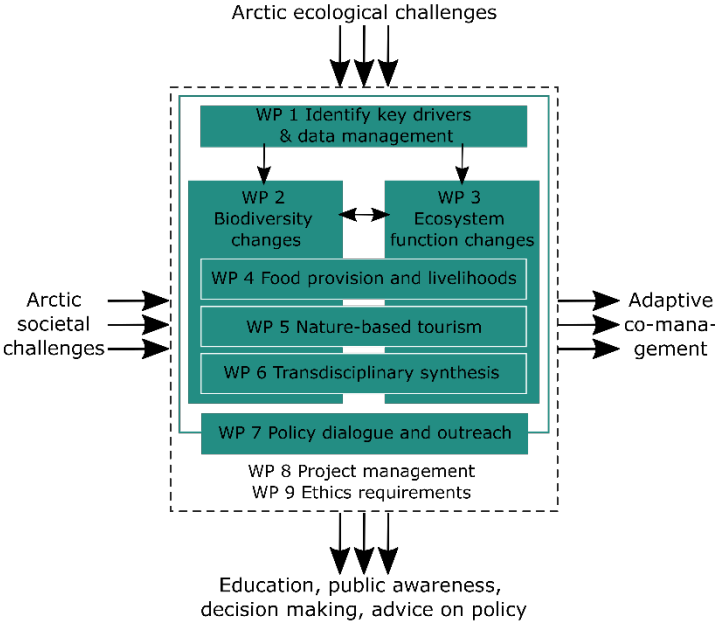
FACE-IT

FACE-IT The future of Arctic coastal ecosystems - Identifying transitions in fjord systems and adjacent coastal areas

The Arctic plays a crucial role in regulating the earth's climate. Hence, the impact of climate change on the Arctic has serious consequences to high latitude ecosystems and societies. The EU-funded FACE-IT project hypothesises that the biodiversity of Arctic coastal zones is changing in line with the rates of cryosphere changes. It also theorises that these changes impact local communities, food production, livelihoods & other ecosystem services.

Objectives/Mission

The overarching objective of FACE-IT is to enable adaptive co-management of social-ecological fjord systems in the Arctic in the face of rapid cryosphere and biodiversity changes. The project will identify ways to manage the impacts of climate change on the cryosphere and marine biodiversity, and the interaction with other drivers of change. FACE-IT will contribute to IPCC assessments as well as key Sustainable Development Goals. The concept of FACE-IT rests on a comparison of selected Arctic fjord systems at different stage of cryosphere loss in Greenland, Svalbard and Finnmark, Northern Norway. The underlying two-pronged hypothesis is that the biodiversity of Arctic coastal zones is changing in accordance with the rates of cryosphere changes, and that these changes affect local communities, food production, livelihoods and other ecosystem services. FACE-IT approaches European Arctic fjords as local social-ecological systems. It gathers a strong interdisciplinary team of internationally recognised experts from both natural and social sciences.



Key facts

Start	01/11/2020	**Project Coordinator**	Kai Bischof
End	31/10/2024	**Project Manager**	Simon Jungblut
EU Contribution	€6,399,273	**Coordinating Organisation**	University of Bremen
Grant No:	869154	**Consortium**	11 Partners

Website:

www.face-it-project.eu/

Social media:

@FACEITArctic FACEITArctic

Instagram (@face_it_arctic) LinkedIn (@The FACE-IT Project).

FORCeS

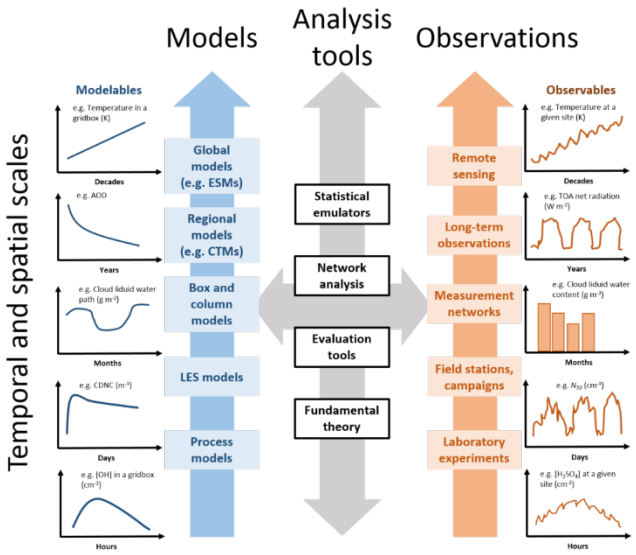
FORCeS - Constrained aerosol forcing for improved climate projections

European scientists will come together to study the magnitude of aerosol radiative forcing caused by anthropogenic emissions. Understanding the role of aerosols and aerosol-cloud reciprocal action is instrumental for policymakers involved in the Paris Agreement. There is currently a level of uncertainty that needs to be cleared up as there is a comprehension gap between processes and pattern implementation on the climate scale. The EU-funded FORCeS project aims to detect essential processes that influence aerosol radiative forcing and study data related to aerosols and clouds' impacts on climate during recent decades.

Objectives/Mission

The overall objective of FORCeS is to understand and reduce the long-standing uncertainty in anthropogenic aerosol radiative forcing, which is crucial in order to increase confidence in climate projections. These projections are highly relevant for decision makers, as they provide key information on emission pathways that will facilitate the targets of the Paris Agreement to be achieved. FORCeS will identify key processes governing aerosol radiative forcing, as well as climate feedbacks related to aerosols and clouds, and improve the knowledge about these processes by bringing together leading European scientists with trans-disciplinary expertise to:

1. exploit the wealth of in-situ and remote sensing data that have emerged during the recent decades;
2. perform dedicated laboratory and field experiments;
3. utilize a range of state-of-the-art computational models;
4. apply novel theoretical methods including machine learning techniques.



Key facts

Start	01/10/2019	**Project Coordinator**	Ilona Riipinen
End	30/09/2023	**Project Manager**	Ana Cordeiro
EU Contribution	€8,026,287	**Coordinating Organisation**	Stockholm University
Grant No:	821205	**Consortium**	## Partners

Website:

www.forces-project.eu/

Social media:

@FORCeS_H2020

INTERACT

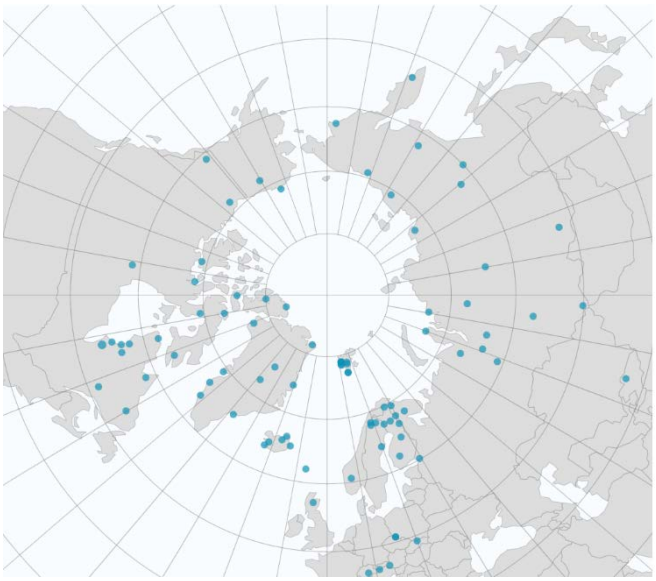
INTERACT – International Network for Terrestrial Research and Monitoring in the Arctic

Climate change affects the Arctic more than twice as much as any other region on Earth. Moreover, the impact of climate change in the Arctic is not geographically limited but causes hazardous events worldwide. Understanding and predicting potential events requires international research and monitoring. The EU-funded INTERACT project is based on an especially successful transnational access programme aiming to achieve best practices for lucrative research, monitoring, education, and outreach to address societal challenges caused by the rapid climate change in the Arctic.

INTERACT coordinates 64 partners and 88 research stations hosting more than 5000 researchers per year in 16 northern countries improving new collaborations, using innovative science and science diplomacy, and establishing a fully integrated infrastructure that will make data and acquired knowledge globally available.

Objectives/Mission

INTERACT III provides comprehensive coordination of 64 partners and 86 research stations. The station managers design best practices to ensure excellent research, monitoring, education and outreach. INTERACT III builds on an extremely successful transnational access program that has already populated the Arctic with 900 researchers to further provide excellent science while reducing the environmental footprints of researchers through improving remote and virtual access. The access transnationality ensures new collaborations, innovative science and science diplomacy at a time of heightened geopolitical tensions. Station managers, transnational access and joint research activities cooperate to address major societal challenges in a fully integrated infrastructure while their data and understanding are made globally available through exceptional outreach and education and policy briefings to decision makers.



Key facts

Start	01/01/2020	**Project Coordinator**	Margareta Johansson
End	31/12/2023	**Project Manager**	Katharina Beckmann
EU Contribution	€10,000,000	**Coordinating Organisation**	Lund University
Grant No:	871120	**Consortium**	64 Partners

Website:

www.eu-interact.org/

Social media:

@INTERACT66 interactofficial

JUSTNORTH

JUSTNORTH -Towards Just, Ethical and Sustainable Arctic Economies, Environments and Societies

Rapid and significant Arctic climate change has sparked a new a wave of economic speculation. Global investors are pinning their hopes on new resources and transportation corridors. Yet local communities, already dealing with the effects of climate change, are concerned that such projects could simply repeat past cycles of northern extraction. Historically, resources and revenues have flowed south while residents have received
little in return save for polluted lands and abandoned infrastructure.

If done right, however, there is a chance for Arctic development to be sustainable and equitable. At present, decisions on economic development tend to be made according to utilitarian ethical principles. Profit and technical feasibility determine a project rather than its ethical implications and impacts on local residents.

JUSTNORTH seeks to build a framework for sustainable development in the Arctic. Researchers are exploring the multiple value systems that converge when specific development projects are proposed in order to identify common core values that can create linkages rather than barriers between competing ethical and value systems.

Bringing together 17 partners with expertise across the social sciences, the project is evaluating 18 case studies using innovative research methodology based on interviews, comparisons and correlations. The project will draw from its findings to develop a framework that can help determine whether the viability of economic activities in the Arctic is in line with Sustainable Development Goals. It will promote the insights and views tabled by Indigenous stakeholders, local businesses, state officials and NGOs.

Objectives/Mission

The project will merge justice theories with sustainable development goals to enable EU policy coherence toward just transitions. This will be integrated with an investigation of the empirical realities of existing Arctic economic activities in 18 case studies using innovative research methodology, through conceptual, comparative, descriptive, correlation, policy, legal and interview-based analysis techniques. Though this, JUSTNORTH will offer policy, legal and regulatory pathway recommendations, by developing a frameworks from the reconciliation of the various ethics and value systems present in the Arctic, which can serve as a cornerstone for determining the viability of economic activities in the Arctic in line with the goals of sustainable development.

Key facts

Start	01/06/2020	**Project Coordinator**	Corine Wood-Donnelly
End	30/11/2023	**Project Manager**	Gustav Sigeman
EU Contribution	€6,156,494	**Coordinating Organisation**	Uppsala University
Grant No:	869327	**Consortium**	17 Partners

Website:

www.justnorth.eu/

Social media:

@JUSTNORTH_EU JUSTNORTHEU

Nunataryuk

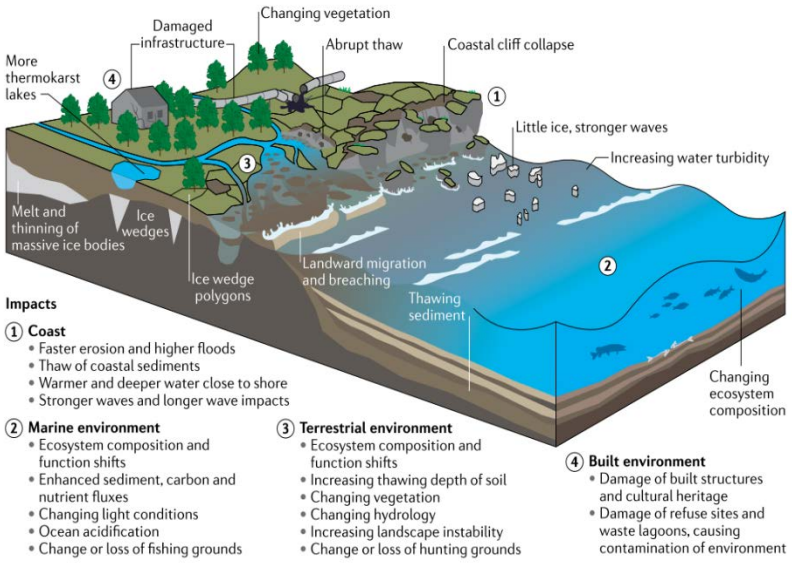
Nunataryuk: Permafrost thaw and the changing arctic coast: science for socio-economic adaptation

Most human activity in the Arctic takes place along permafrost coasts, making them a key interface. They have become one of the most dynamic ecosystems on Earth because permafrost thaw is now exposing these coasts to rapid change: change that threatens the rich biodiversity, puts pressure on communities that live there and contributes to the vulnerability of the global climate system. NUNATARYUK will determine the impacts of thawing coastal and subsea permafrost on the global climate, and will develop targeted and co-designed adaptation and mitigation strategies for the Arctic coastal population.

Objectives/Mission

NUNATARYUK brings together world-leading specialists in natural science and socio-economics to:

1. develop quantitative understanding of the fluxes and fates of organic matter released from thawing coastal and subsea permafrost;
2. assess what risks are posed by thawing coastal permafrost, to infrastructure, indigenous and local communities and people's health, and from pollution;
3. use this understanding to estimate the long-term impacts of permafrost thaw on global climate and the economy



NUNATARYUK will be guided by a Stakeholders' Forum of representatives from Arctic coastal communities and indigenous societies, creating a legacy of collaborative community involvement and a mechanism for developing and applying innovative evidence-based interventions to enable the sustainable development of the Arctic.

Key facts

Start	01/11/2017	**Project Coordinator**	Hugues Lantuit
End	31/10/2023	**Project Manager**	Leena Viitanen
EU Contribution	€11,500,000	**Coordinating Organisation**	Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research
Grant No:	773421	**Consortium**	26 Partners

Website:

www.nunataryuk.org/

Social media:

@nunataryuk H2020Research

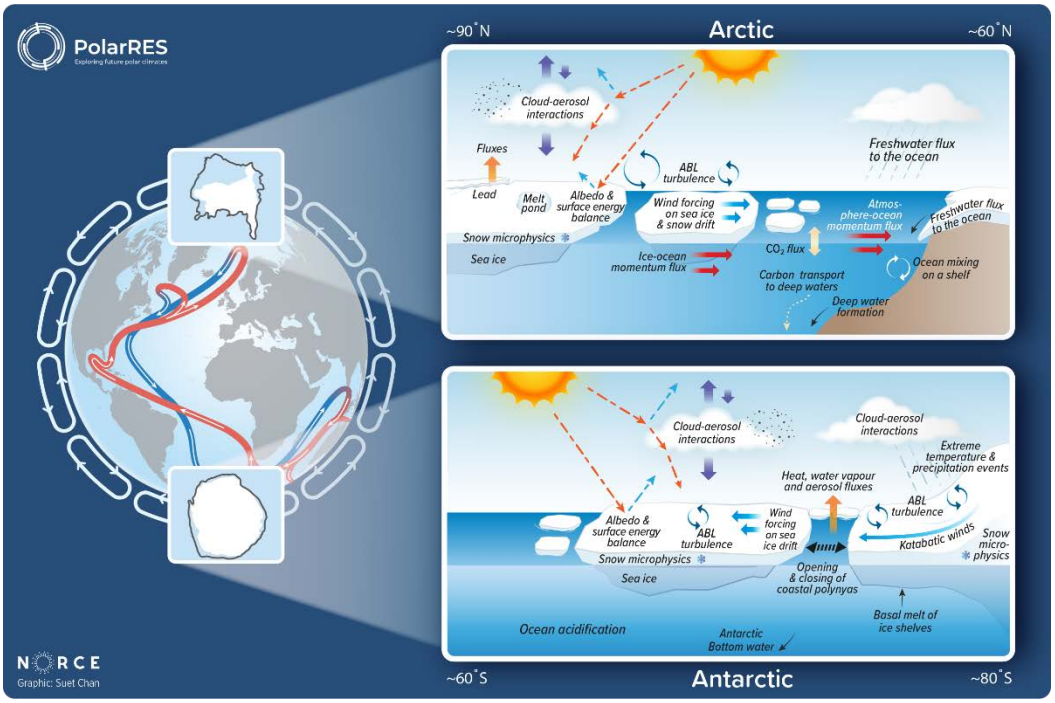
PolarRES

PolarRES (Polar Regions in the Earth System)

The Polar regions play a crucial role in balancing the global climate system – with the poles heating up much faster than the rest of the world. Yet, climate projections for the Polar regions still have significant uncertainties. This is hampering efforts to curb climate change and deal with the effects we already see at play - not only within the Polar regions, but also in Europe and the rest of the world. PolarRES will advance our understanding of how the climate of the Arctic and Antarctic will respond to future changes in the global circulation. PolarRES will also deliver new insights into how physical and chemical processes, crucial for atmosphere-ocean-ice interactions, can shape the global climate system.

Objectives/Mission

A key outcome from the PolarRES project will be more confident climate change projections for the Polar regions. This will enable better mitigation and adaptation actions in the polar regions.



Key facts

Start	01/09/2021	**Project Coordinator**	Priscilla Mooney
End	31/08/2025	**Project Manager**	Ryan Weber
EU Contribution	€8,000,000	**Coordinating Organisation**	NORCe
Grant No:	101003590	**Consortium**	17 Partners

Website:

www.polarres.eu/

Social media:

@PolarRES_eu

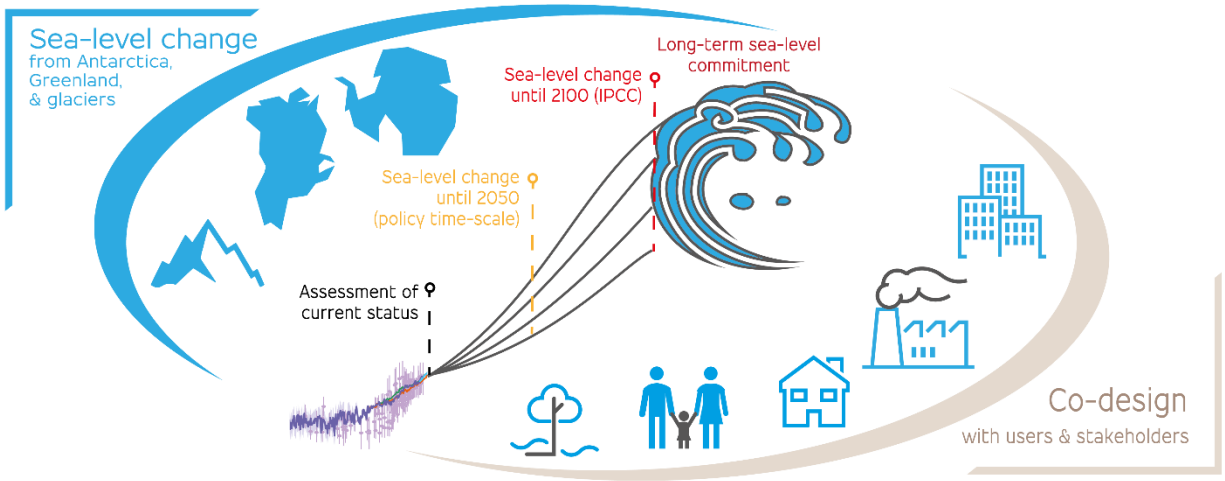
PROTECT

PROTECT cryosphere & sea level

A closer look at the interactions between atmosphere, ocean and ice sheets: Sea level rise (SLR) due to climate change is a serious global threat that can result in land ice loss and ocean thermal expansion. It also results in catastrophic consequences for the future of coastal regions. As land ice contribution is increasing, policymakers are concerned about the threats ice sheet change represents. The EU-funded PROTECT project will drive SLR projections beyond the state of the art and provide a long-standing scientific and social contribution.

Objectives/Mission

PROTECT will significantly improve our understanding and model representation of ice sheet processes and offer a new approach in modelling the interactions between atmosphere, ocean and ice sheets. PROTECT will also improve the strength of the resulting SLR projections, envision the future social impact of SLR and train the next generation of sea-level scientists.



Key facts

Start	01/09/2020	**Project Coordinator**	Gael Durand
End	31/08/2024	**Project Manager**	Amélie Bataille
EU Contribution	€10,000,000	**Coordinating Organisation**	CNRS
Grant No:	869304	**Consortium**	26 Partners

Website:

www.protect-slr.eu

Social media:

@ProtectSlr @Protect

SIOS

Svalbard Integrated Arctic Earth Observing System

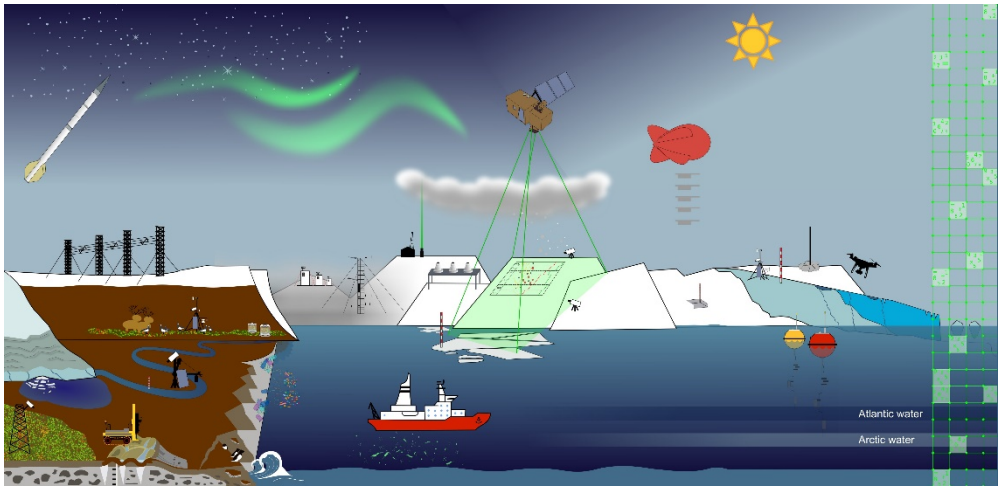
Svalbard Integrated Arctic Earth Observing System (SIOS) is an international consortium of research institutions with research interest and infrastructure in and around the Arctic Archipelago of Svalbard. Within SIOS researchers collaborate by sharing data, and research infrastructure to build an efficient observing system that focuses on long-term monitoring of parameters that are important to understand the Arctic in the context of global environmental change.

Objectives/Mission

SIOS is a regional observing system that integrates the extensive observation capacity and diverse world-class research infrastructure provided by many institutions already established in Svalbard. This includes a substantial capability for utilising remote sensing resources to complement ground-based observations.

SIOS focuses on processes and their interactions between the different spheres, i.e., biosphere, geosphere, atmosphere, cryosphere, and hydrosphere. The core observational programme of SIOS provides the research community with systematic observations that are sustained over time. To use the observing system more efficiently, SIOS offers a range of services, including a distributed data management system, remote sensing services, logistical support and advice, webinars, and training courses. It publishes the annual State of Environmental Science in Svalbard (SESS) report.

SIOS is an international research infrastructure, hosted by Norway. Its central node is the SIOS Knowledge Centre located in Longyearbyen, Norway. It coordinates joint activities and coordinates the services provided by the SIOS community.



Key facts

Start	2018	**Director**	Heikki Lihavainen
End	n/a	**Information Officer**	Christiane Hübner
EU Contribution	n/a	**Coordinating Organisation**	SIOS
Grant No:	n/a	**Consortium**	28 Partners

Website:

www.sios-svalbard.org/

Social media:

@SIOS_KC SIOSKnowledgeCentre

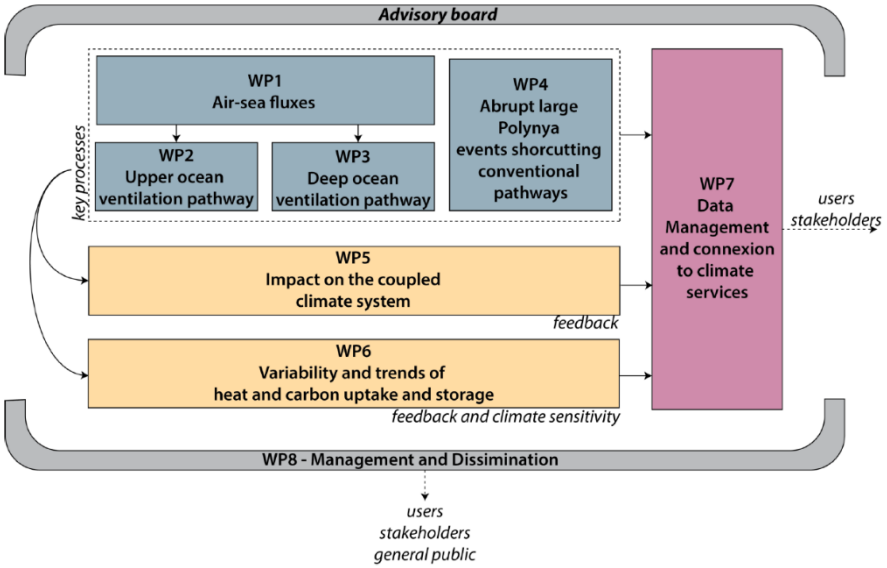
SO-CHIC

SO-CHIC (Southern Ocean Carbon and Heat Impact on Climate)

The Southern Ocean regulates the global climate by controlling heat and carbon exchanges between the atmosphere and the ocean. It is responsible for about 60-90% of the excess heat (i.e. associated with anthropogenic climate change) absorbed by the World Oceans each year, and is also recognised to largely control decadal scale variability of Earth carbon budget, with key implications for decision makers and regular global stocktake agreed as part of the Paris agreement. Despite such pivotal climate importance, its representation in global climate model represents one of the main weaknesses of climate simulation and projection because too little is known about the underlying processes. Limitations come both from the lack of observations in this extreme environment and its inherent sensitivity to intermittent small-scale processes that are not captured in current Earth system models.

Objectives/Mission

To contribute to reducing uncertainties in climate change predictions, the EU-funded SO-CHIC project will quantify variability of heat and carbon budgets in the Southern Ocean through an investigation of the key processes controlling exchanges between the atmosphere, ocean and sea ice using a combination of observational and modelling approaches. It will combine observation with existing decades-long time series and state-of-the-art modelling.



Key facts

Start	01/11/2019	**Project Coordinator**	Jean-Baptiste-Sallée
End	31/10/2024	**Project Manager**	Amélie Lecornec
EU Contribution	€7,989,925	**Coordinating Organisation**	Sorbonne University
Grant No:	821001	**Consortium**	16 Partners

Website:

www.sochic-h2020.eu/

Social media:

@SO_CHIC_EU

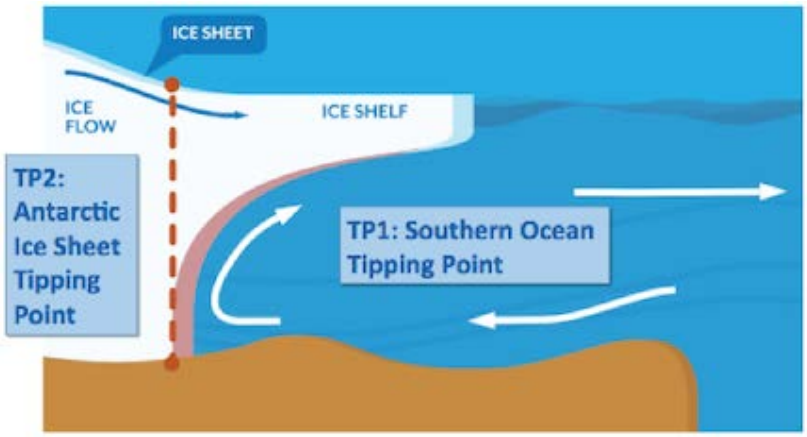
TiPACCs

TiPACCS – Tipping Points in Antarctic Climate Components

TiPACCs is investigating the possibility of sudden and large changes in Antarctic Climate Components. Recently, researchers found relatively warm waters below Antarctic ice shelves, indicating that the Antarctic continental shelf seas can tip from a 'cold' to a 'warm' state. Concurrently, recent research indicates that ice sheets, especially the parts of the ice sheet that rest on a bed below sea level, are prone to an unstable and irreversible retreat. The change in these two components (cold-to-warm ocean, and stability regime of the Antarctic Ice Sheet) are linked through to the impact that ice shelves can have on the upstream ice sheet and on the ocean below. If irreversible changes occur in the Antarctic components, and so-called tipping points are crossed, the ice sheet will likely quickly retreat, causing a dramatic increase in global mean sea level.

Objectives/Mission

- Determine the changes in surface forcing required to switch the Antarctic continental shelf seas from cold to warm state (Ocean Tipping Point), and to quantify the resulting changes in ocean-induced ice-shelf basal melting.
- Determine the stability regime of the grounding lines of the Antarctic Ice Sheet and the existence of tipping points with respect to ice-shelf melting (Ice Sheet Tipping Point).
- Determine the impacts that a switch in the ocean state from cold to warm has on the stability regime of the grounding lines and the resulting implications for global sea level.
- Provide a list of early warning indicators for the Tipping Points in the Antarctic Climate Components, and disseminate our improved understanding of the processes and impact of the tipping points to general public, policy makers and governmental panels



Key facts

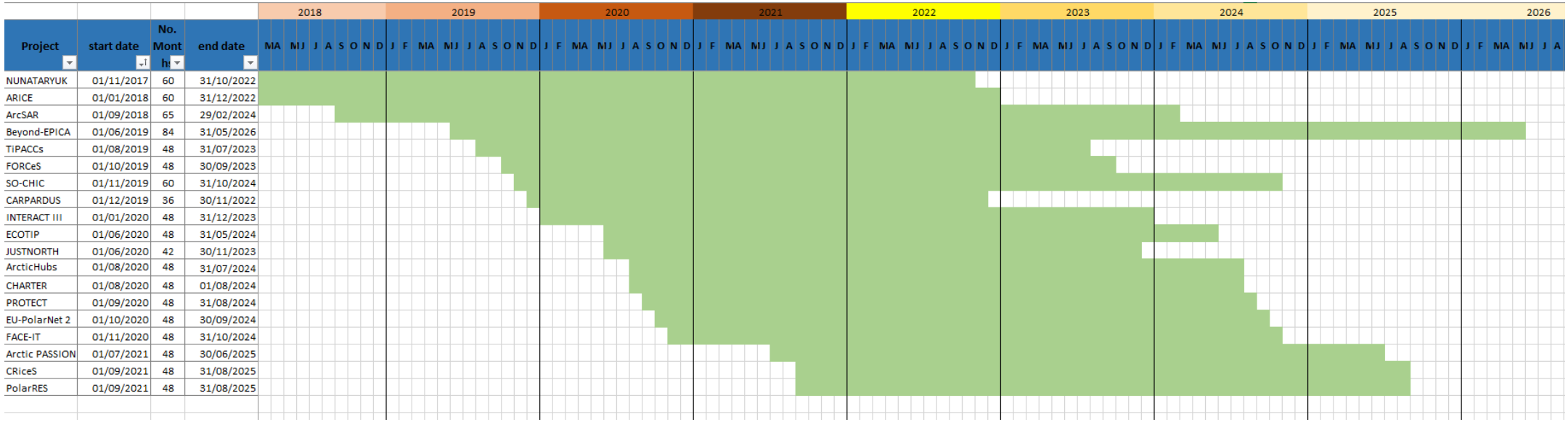
Start	01/08/2019	**Project Coordinator**	Petra Langebroek & Svein Østerhus
End	31/07/2023	**Project Manager**	Kate Dy
EU Contribution	€4,600,000	**Coordinating Organisation**	NORCE
Grant No:		**Consortium**	5 Partners

Website:

www.tipaccs.eu/

Social media:

@TiPACCS_EU @TiPACCs


2018
2019
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2026
Project
start date
No. Month
end date
NUNATARYUK 01/11/2017 60 31/10/2022
ARICE 01/01/2018 60 31/12/2022
ArcSAR 01/09/2018 65 29/02/2024
Beyond-EPICA 01/06/2019 84 31/05/2026
TiPACCs 01/08/2019 48 31/07/2023
FORCeS 01/10/2019 48 30/09/2023
SO-CHIC 01/11/2019 60 31/10/2024
CARPARDUS 01/12/2019 36 30/11/2022
INTERACT III 01/01/2020 48 31/12/2023
ECOTIP 01/06/2020 48 31/05/2024
JUSTNORTH 01/06/2020 42 30/11/2023
ArcticHubs 01/08/2020 48 31/07/2024
CHARTER 01/08/2020 48 01/08/2024
PROTECT 01/09/2020 48 31/08/2024
EU-PolarNet 2 01/10/2020 48 30/09/2024
FACE-IT 01/11/2020 48 31/10/2024
Arctic PASSION 01/07/2021 48 30/06/2025
CRiceS 01/09/2021 48 31/08/2025
PolarRES 01/09/2021 48 31/08/2025

The following projects have ended, but are included here for information. One of the Cluster objectives is to maintain the legacy of the projects after they finish, to allow

Next Section – Ended Projects

The following fact sheets are for all projects ended as of May 2022

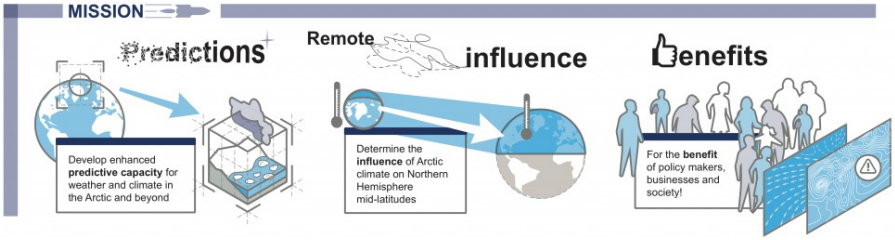
APPLICATE

APPLICATE: Advanced Prediction in Polar regions & beyond: modelling, observing system design and LInkages associated with a Changing Arctic climaTE

As the Arctic region is undergoing some of the most dramatic changes in centuries, the impact of these transformations on other regions of the world is still somewhat unknown. The APPLICATE project was developed with this goal: to shed some light on the processes that connect phenomena like sea ice loss in the Arctic to weather and climate changes in Europe and North America, as well as to advance predictive capacity for weather and climate in the Arctic and midlatitudes. To tackle the challenge from multiple perspectives, the project coalesced European excellence by bringing together experts from the weather and climate research communities, with the aim to join forces and investigate processes and changes in the Arctic region and beyond.. Coordinated by an AWI team, led by Thomas Jung since November 2016, the APPLICATE project reached the finish line on April 30th, 2021.

Objectives/Mission

During the project's duration, important milestones have been achieved to advance knowledge in understanding how the Arctic and lower latitudes may be linked. APPLICATE was instrumental in developing and promoting international collaborations like the polar amplification model intercomparison projects (PAMIP), while advancing innovative approaches and datasets using numerical weather prediction and climate models. The project's many contributions include the coordination of model intercomparison experiments (e.g., PAMIP, SIMIP) provision of novel datasets (e.g., YOPP and ECMWF datasets), the development of evaluation software with a clear polar focus (e.g., ESMvalTool), all highlighting the high profile of APPLICATE's work and representing a steppingstone in improving knowledge about climate change in support of the Intergovernmental Panel on Climate Change. Many efforts carried out in APPLICATE have led to influential papers such as *The Polar Amplification Model Intercomparison Project (PAMIP) contribution to CMIP6* by Doug Smith and colleagues and *Improving Met Office seasonal predictions of Arctic sea ice using assimilation of CryoSat-2 thickness* by Blockley and Peterson, demonstrating not only the high quality of APPLICATE's scientific endeavours, but also the dedication of the people involved in the project in disseminating results through a clear and open approach



Key facts

Start	01/11/2016	**Project Coordinator**	Thomas Jung
End	30/04/2021	**Project Manager**	Luisa Cristini
EU Contribution	€ 799591,25	**Coordinating Organisation**	Alfred Wegener Institute
Grant No:	727862	**Consortium**	15 Partners

Website:

www.applicate-h2020.eu

Social media:

@applicate_eu ApplicateEU

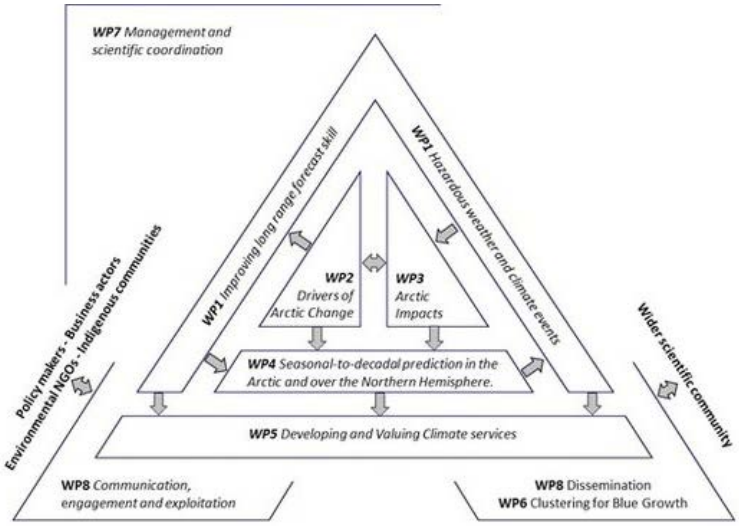
BLUE-ACTION

Blue-Action: Arctic Impact on Weather and Climate is a Research and Innovation action.

The overall objective of Blue-Action was to actively improve our ability to describe, model, and predict Arctic climate change and its impact on Northern Hemisphere climate, weather and their extremes, and to deliver valued climate services of societal benefit. In its 5 years of activities (2016-2021), Blue-Action has provided fundamental and empirically-grounded, executable science that can quantify and explain the role of a changing Arctic in increasing the predictive capability of weather and climate of the Northern Hemisphere.

Objectives/Mission

To achieve this objective, Blue-Action has taken a transdisciplinary approach, bridging scientific understanding within Arctic climate, weather and risk management research with key stakeholder knowledge of the impacts of climatic weather extremes and hazardous events, leading to the co-design of better services. This bridge has built on innovative statistical and dynamical approaches to predict weather and climate extremes. In a co-design and co-creation dialogue with users, Blue-Action has taken stock in existing knowledge about cross-sectoral impacts and vulnerabilities with respect to the occurrence of these events and their prediction. Modelling and prediction capabilities have been enhanced by targeting firstly, lower latitude oceanic and atmospheric drivers of regional Arctic changes and secondly, Arctic impacts on Northern Hemisphere climate and weather extremes. Coordinated multi-model experiments have been key to test new higher resolution model configurations, innovative methods to reduce forecast error, and advanced methods to improve uptake of new Earth observations' assets have been developed and implemented.



Key facts

Start	01/12/2016	**Project Coordinator**	Steffen Olsen
End	30/09/2021	**Project Manager**	Chiara Bearzotti
EU Contribution	€7,500,000	**Coordinating Organisation**	Danish Meteorological Institute
Grant No:	727852	**Consortium**	## Partners

Website:

www.blue-action.eu

Social media:

@BG10Blueaction

ICE-ARC

ICE-ARC – Ice, Climate, Economics – Arctic Research on Change

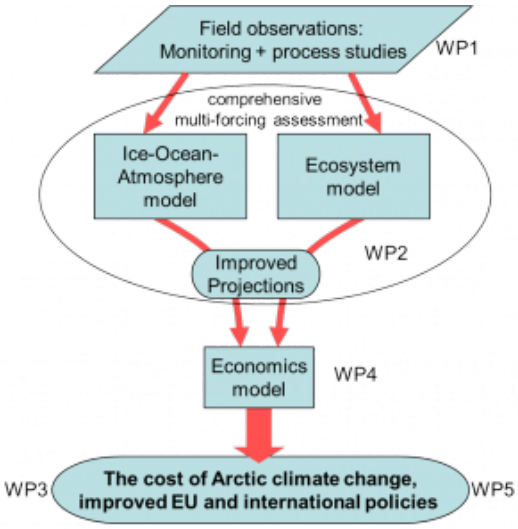
Directly assessing the social and economic impact of Arctic sea-ice loss

ICE-ARC looked into the current and future changes in Arctic sea ice – both from changing atmospheric and oceanic conditions. The project also investigated the consequences of these changes both on the economics of the area and globally, and social aspects such as on indigenous peoples.

Particular focus was on the rapid retreat and collapse of Arctic sea-ice cover. The most spectacular retreat is occurring in summer, and the complete loss of summer sea ice may occur in a very short period of time – years to decades. There is also a significant reduction in sea ice extent in all seasons, which, if continued, will result seasonal ice cover and a widening annual window of the ice-free season.

Objectives/Mission

Understanding the full extent of changes underway in the Arctic requires a great volume of highly diverse information. ICE-ARC responded to this need with a multidisciplinary research program that blends together technology, observations, and models. ICE-ARC engineers have developed innovative sensors that advance polar technologies and propel polar research into the future. ICE-ARC researchers have deployed nearly 50 robotic platforms from numerous expeditions across the Arctic Ocean. We have collected data that encompass the marine environment; from cloud thickness, solar radiation and air temperature through to sea-ice thickness, ocean salinity, zooplankton species and abundance, and beyond.



ICE-ARC collected data from satellite and airborne sensors as well as systems deployed on the ice, on the sea surface, and underwater. These together improve our understanding about the workings of the changing Arctic system. Remoteness and extreme weather conditions represent significant challenges for carrying out research in the Arctic; hence, datasets are sparse. Partnerships with local communities, as well as advanced autonomous technology and techniques make year-round real-time monitoring and data capture a reality.

Key facts

Start	01/01/2014	**Project Coordinator**	Jeremy Wilkinson
End	31/12/2018	**Project Manager**	Elaina Ford
EU Contribution	€11,500,000	**Coordinating Organisation**	British Antarctic Survey
Grant No:	603887	**Consortium**	24 Partners

Website:

www.ice-arc.eu

Social media:

@ICE-ARCEU

iCUPE

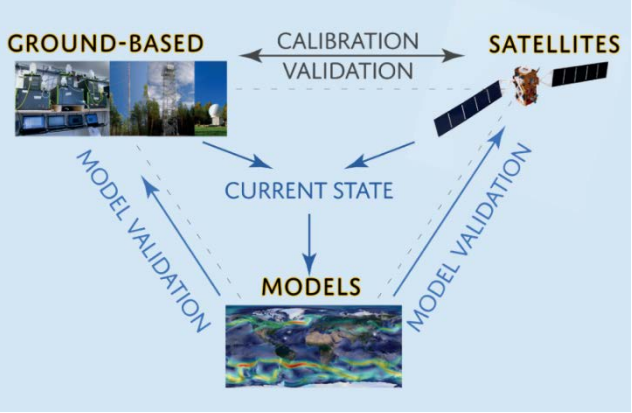
iCUPE – Integrative and Comprehensive Understanding on Polar Environments

iCUPE answers to ERA-PLANET (European network for observing our changing planet) thematic strand 4 (Polar areas and natural resources). The project is motivated by the fact that the role of polar regions will increase in terms of megatrends such as globalization, new transport routes, demography and use of natural resources. These megatrends have environmental effects and will drastically affect e.g. regional and transported pollutant concentrations. As a consequence, the polar areas face interconnected grand challenges.

The vision driving iCUPE activities is that we need to establish and maintain long-term, coherent and coordinated observations and research activities on environmental quality and natural resources in polar areas. The core idea of iCUPE is the development of novel, integrated, quality-controlled and harmonized in-situ observations and satellite data in the polar areas, as well as data products to the end users. iCUPE combines integrated in-situ and satellite Earth Observation with a modelling platform. By doing this it 1) synthesizes data from comprehensive long-term measurements, intensive campaigns and satellites, collected during the project or provided by on-going international initiatives 2) relates the observed parameters to impacts, and 3) delivers novel data products, metrics and indicators to the stakeholders concerning the environmental status, availability and extraction of natural resources in the polar areas. These data, metrics and indicators will be targeted to identified stakeholders. They will be useful for policy development and for improving and clearly communicating our multidisciplinary understanding of status of the polar environment and pollution dynamics in the future. The knowledge generated is relevant to the general population, policy makers and scientists.

Objectives/Mission

The ambition in iCUPE will make significant advances towards a better integration between existing in-situ observational networks for polar measurement data on short-lived air pollutants including both aerosols and trace gases, as well as contaminants. The focus is on the availability of long-time data series and on the facilitation of intensive campaigns as well as on piloting near real-time data. Quality control, data flows and data streams will be harmonized within iCUPE.



Key facts

Start	01/02/2016	**Project Coordinator**	Tuuka Petäjä
End	31/01/2022	**Project Manager**	Ella-Maria Duplissy
EU Contribution	€10,962,256	**Coordinating Organisation**	Helsinki University
Grant No:	689443	**Consortium**	14 Partners

Website:

www.atm.helsinki.fi/icupe/

Social media:

@iCUPE_PO

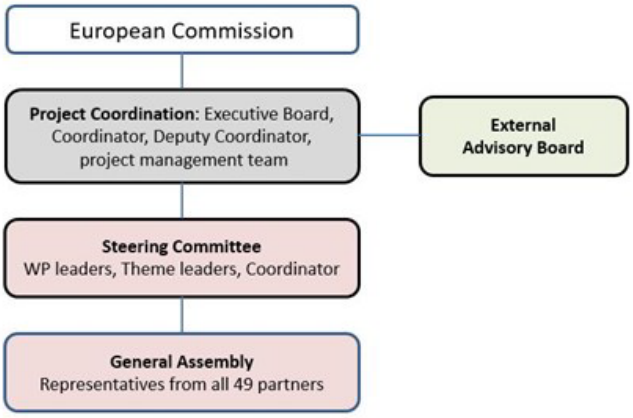
INTAROS

INTAROS

INTAROS aimed to develop an integrated Arctic Observation System (iAOS) by extending, improving and unifying existing systems in the different regions of the Arctic. INTAROS has a strong multidisciplinary focus, with tools for integration of data from atmosphere, ocean, cryosphere and terrestrial sciences, provided by institutions in Europe, North America and Asia. INTAROS is assessing strengths and weaknesses of existing observing systems – both satellite and in-situ – and contributes with innovative solutions to fill some of the critical gaps in the in situ observing network.

Objectives/Mission

INTAROS is developing a platform, iAOS, to search for and access data from distributed databases. INTAROS includes development of community-based observing systems, where local knowledge is merged with scientific data. An integrated, sustainable and long-term Arctic Observation System will enable better-informed decisions and better-documented processes within key sectors (e.g. local communities, shipping, tourism, fishing), in order to strengthen the societal and economic role of the Arctic region and support the EU strategy for the Arctic and related maritime and environmental policies.



Key facts

Start	01/12/2016	**Project Coordinator**	Stein Sandven
End	28/02/2022	**Project Manager**	Kjetil Lygre
EU Contribution	€15,490,067	**Coordinating Organisation**	Nansen Environmental and Remote Sensing Center
Grant No:	727890	**Consortium**	49 Partners

Website:

www.intaros.eu

Social media:

@IntarosProject facebook.com/intaros

KEPLER

KEPLER – Key Environmental monitoring for Polar Latitudes and European Readiness

KEPLER was a multi-partner initiative, built around the operational European Ice Services and Copernicus information providers, to prepare a roadmap for Copernicus to deliver an improved European capacity for monitoring and forecasting the Polar Regions.

Our motivation was to put the public and stakeholders at the centre of Copernicus. This follows the recommendations of the 'Copernicus User Uptake' review, and its 6 themes of:

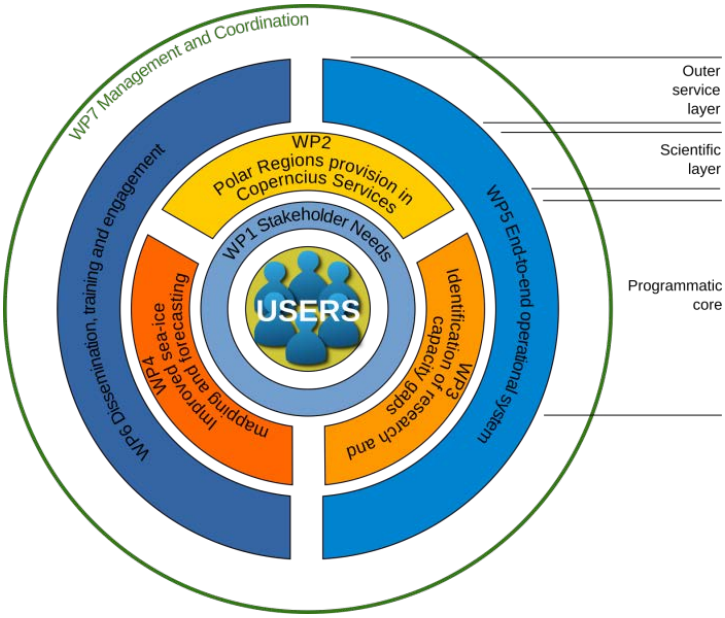
1. Raising awareness for the Copernicus programme,
2. Informing and educating Copernicus users,
3. Engaging Copernicus users in public and private sector, and
4. Enabling access to Copernicus data and information.
5. Identification of research gaps regarding integration/assimilation, and
5. Improved sea-ice mapping and forecasting.

Objectives/Mission

KEPLER aimed to release the full potential of Polar Regions Earth Observation, including from ESA and EUMETSAT, by identifying and eliminating the barriers that impede the use of the tremendous resource that is Copernicus. This combines two key elements of the call:

- bringing together key European stakeholders and competent entities,
- growing the Copernicus brand and user-base through providing enhanced scientific and technical support.

Our objective was to provide a mechanism that enables the broad range of Polar Regions stakeholders to be equipped with the most accurate and relevant environmental information so that they can seize the many benefits that Copernicus products generate for society and economy.



Key facts

Start	01/01/2019	**Project Coordinator**	Nick Hughes
End	30/06/2021	**Project Manager**	Elaina Ford
EU Contribution	€2,899,157	**Coordinating Organisation**	Met Norway
Grant No:	821984	**Consortium**	15 Partners

Website:

www.kepler-polar.eu

https://map.kepler-polar.eu/

Social media:

@KeplerEU KeplerEU

EU Polar Cluster

www.polarcluster.eu

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