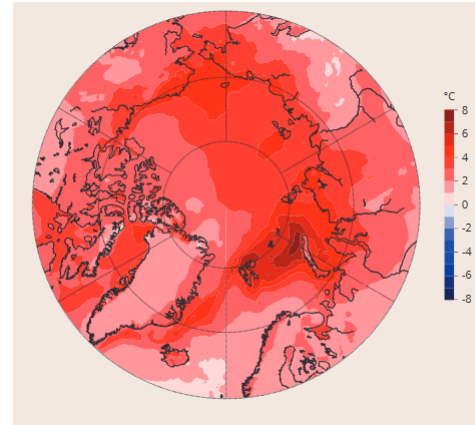


Arctic PASSION - a 4-year program to advance a pan Arctic Observing System of Systems in support of societal needs

Michael Karcher and the Arctic PASSION team



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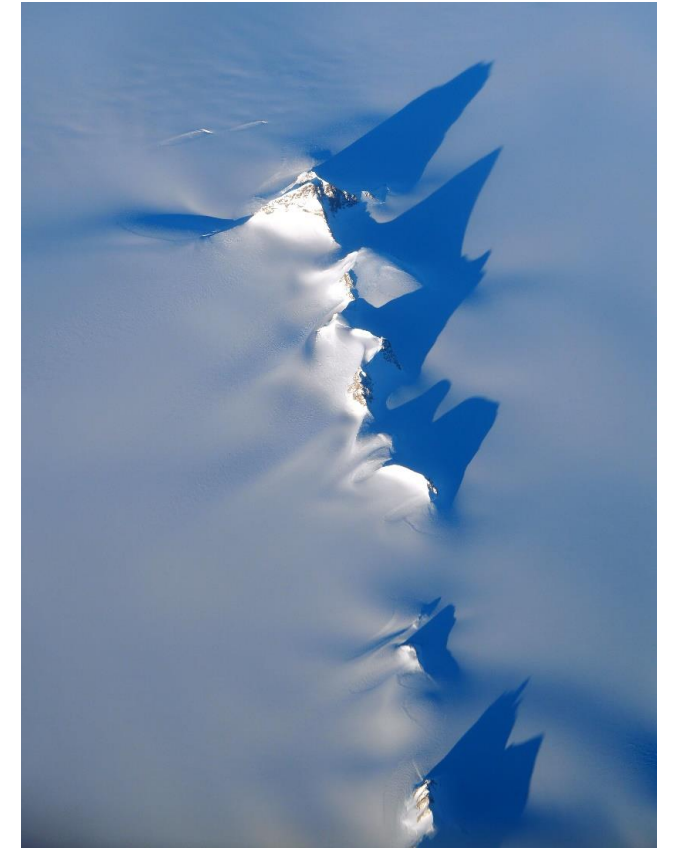
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ARCTIC PASSION

Pan-Arctic Observing
System of Systems:
Implementing Observations
for Societal Needs

- European Commission H2020 Program
- 4 years, 18 countries
- 35 partner organizations and 6 Indigenous Communities
- July 2021 – June 2025
- Website: www.arcticpassion.eu
- Coordination: Alfred Wegener Institute for Polar and Marine Research



© M. Karcher

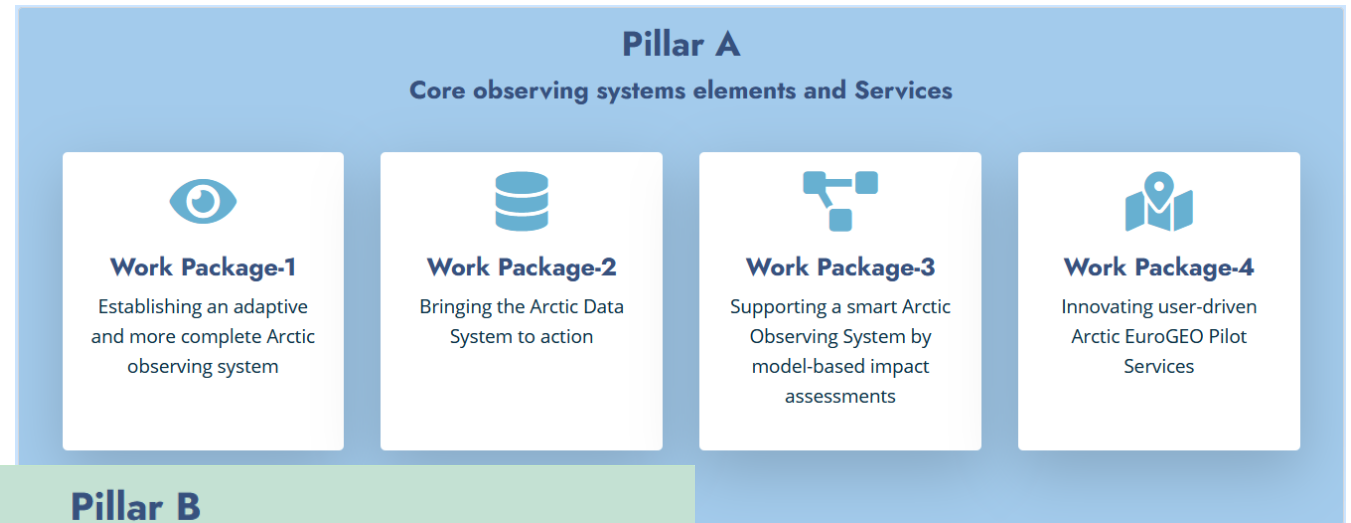


Overall Project Objectives

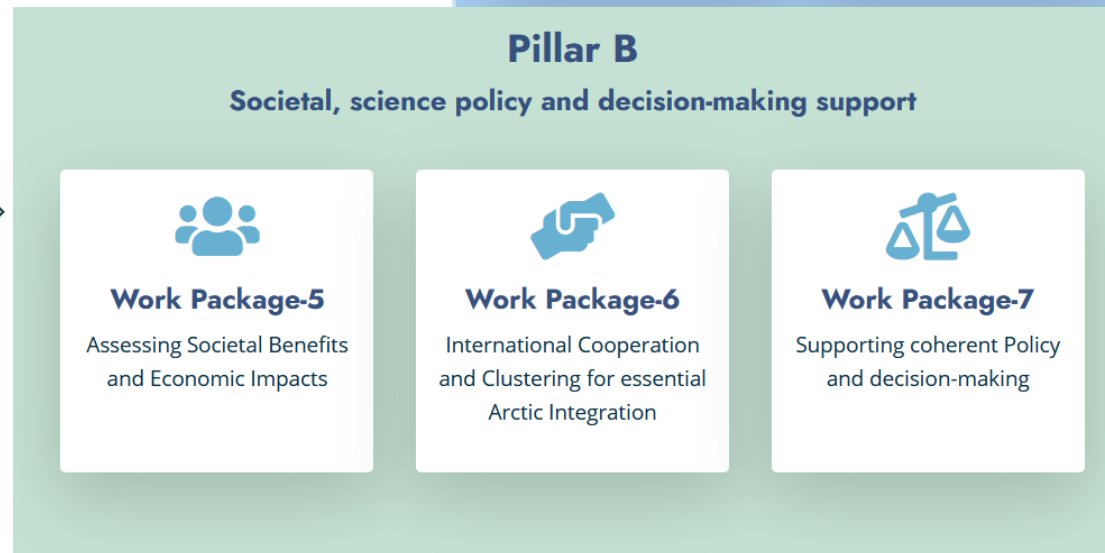
- Co-create a **coherent, integrated and sustainable pan-Arctic Observing System of Systems**
- Meaningful collaboration with **Arctic communities, Indigenous Peoples and organisations;**
- **Expand and better coordinate monitoring capabilities**, also through **broad inclusion of Indigenous Knowledge and Local Knowledge;**
- Improve **data interoperability** and simplify access to ‘application-ready’ environmental data for the benefit of all users;
- Develop **EuroGEO Pilot Services and support SAON to upgrade Arctic GEOSS into a ‘GEO initiative’**
- Initiate **SAV Expert Panels** and develop SAVs in support of SAON’s ROADS program

The Structure of Arctic PASSION

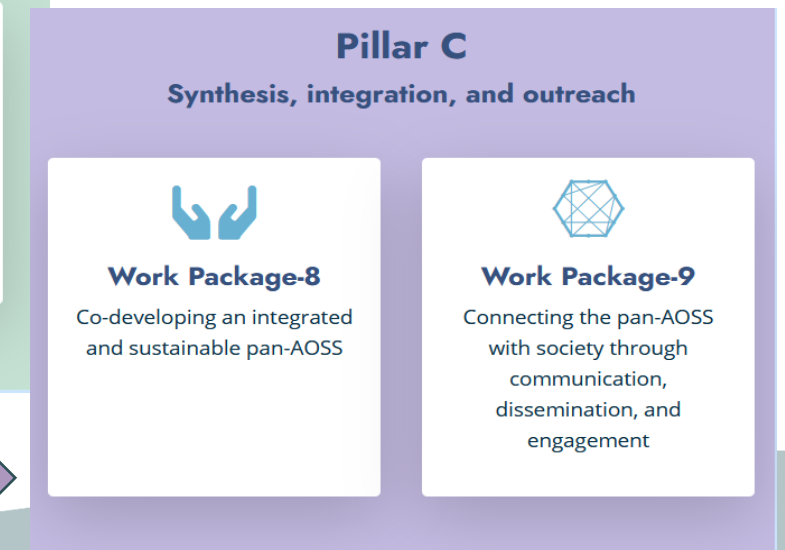
Strengthening
core observing
system elements



Decision-making
support



Synthesis and
outreach



- 'Event Database of CBM Using Oral Histories, IK and LK' (Snowchange)
- 'Pan-Arctic requirements-driven Permafrost' (AWI)
- 'State of the Arctic Environment' (Information hub) (NPI)
- 'Integrated Fire Risk Management - INFRA' (CNR)
- 'Local Atmospheric Pollutant Forecast Service' (JRC)
- 'Improving Safety for Shipping in the Polar Seas Service' (BAS)
- 'CBM for Arctic marine climate change, noise pollution & impacts on marine living resources' (GINR/DMI)
- 'Lake Ice Service for Arctic Climate and Safety' (SYKE)

Shared Arctic Variables (SAVs) in support of SAON ROADS

Concept based on SAON ROADS and Arctic Observing Summit (AOS).

Sets of observables that help tackling local/regional problems (based on science, IK & LK)

Arctic PASSION with Canadian partners and US RNA CoObs first projects to launch SAV processes



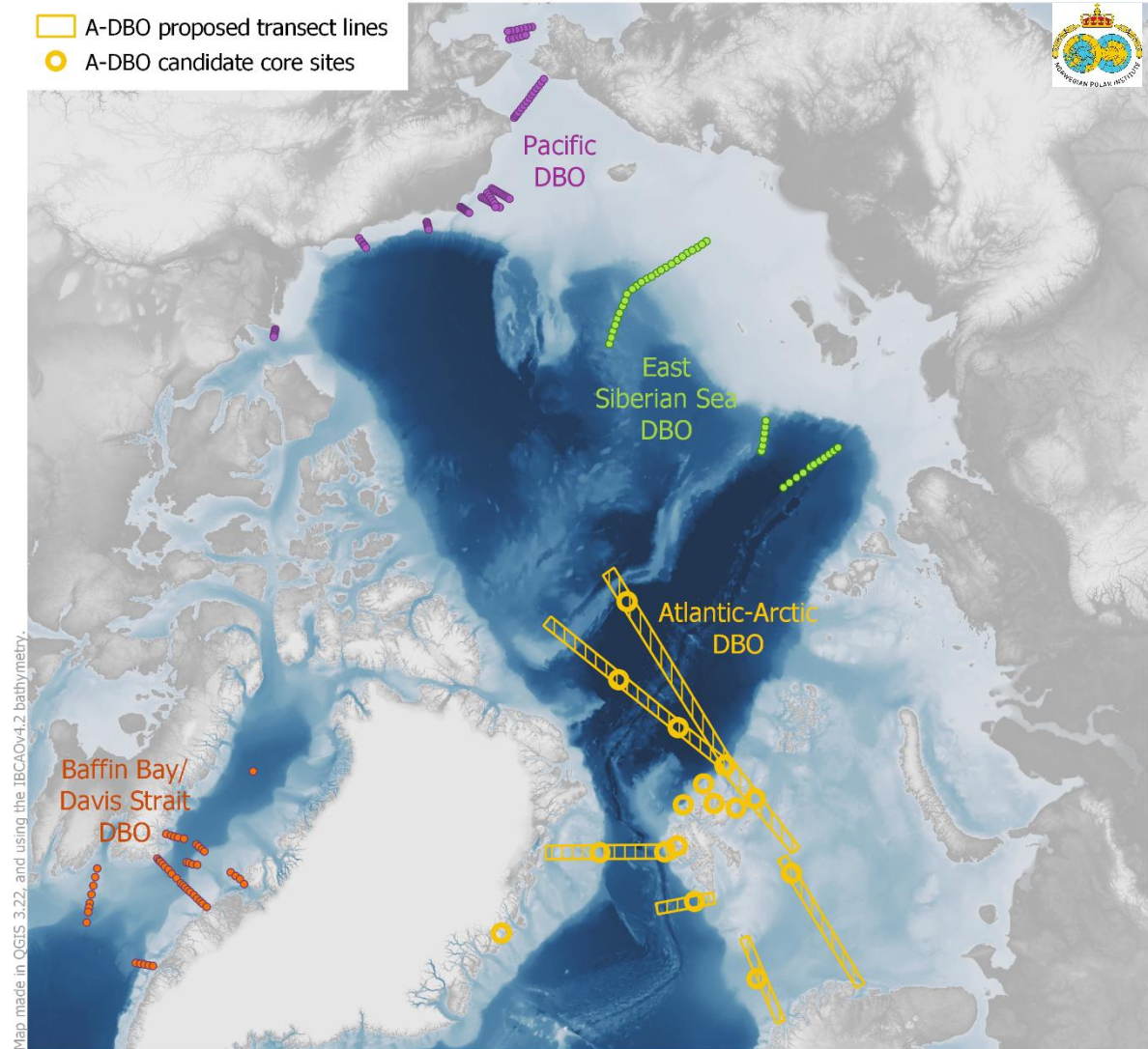
Three SAV themes of relevance

- *Permafrost (Living on frozen ground)*
- *Wildfires*
- *Sea Ice*

The Atlantic-Arctic Distributed Biological Observatory

- a comprehensive marine observing system for climate and environment

- Identify key locations for collaborative monitoring and research
- Joint and open planning - better use and sharing of infrastructure
- Better and more open sharing of data, common protocols for data processing and handling
- Create win-win situations between institutions with long-term funding and mandates, and those working on project basis with more focused research objectives
- For more information, please visit <https://arcticpassion.eu/adbo/>



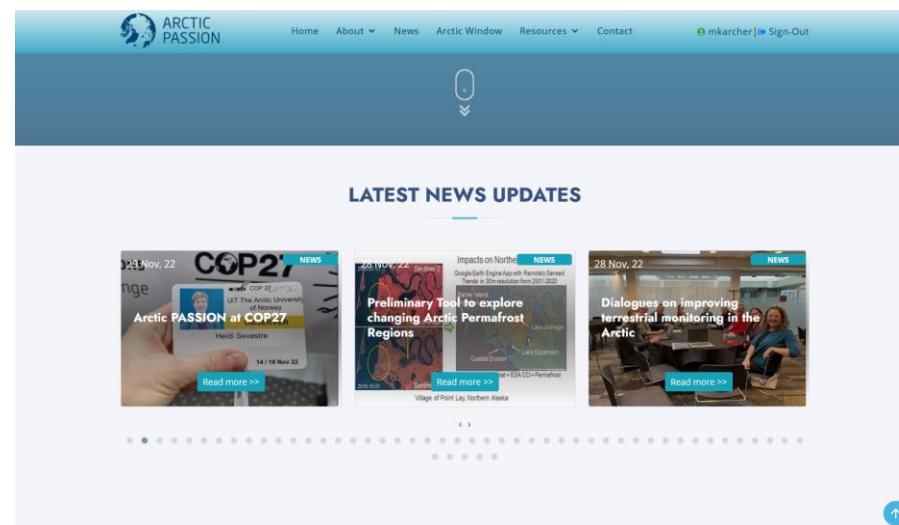
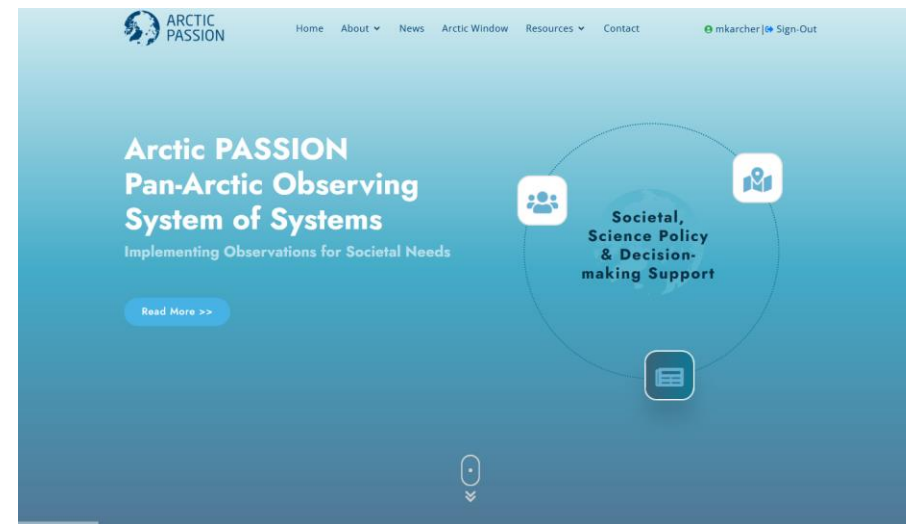
Note: preliminary A-DBO map, to be further refined



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