BLUE ACTION

Arctic Impact on Weather and Climate

SAMS Research Services Ltd

Climate-KIC

Translating advances in Arctic climate science to climate services across the Northern Hemisphere

Raeanne Miller[1], Mark Payne[2], Kathrin Keil[3], Erik W. Kolstad[4], Joan Ballester[5], Pamela Lesser[6], Peter Normann Vangsbo[7]

Why Climate Services?

Weather and climate prediction in the Arctic and northern regions is inherently challenging and year-on-year and decadal variability makes it difficult to detect reliable signals of change. Changes in Arctic climate and weather patterns also influence Northern Hemisphere weather and climate, and potentially other climate systems worldwide.

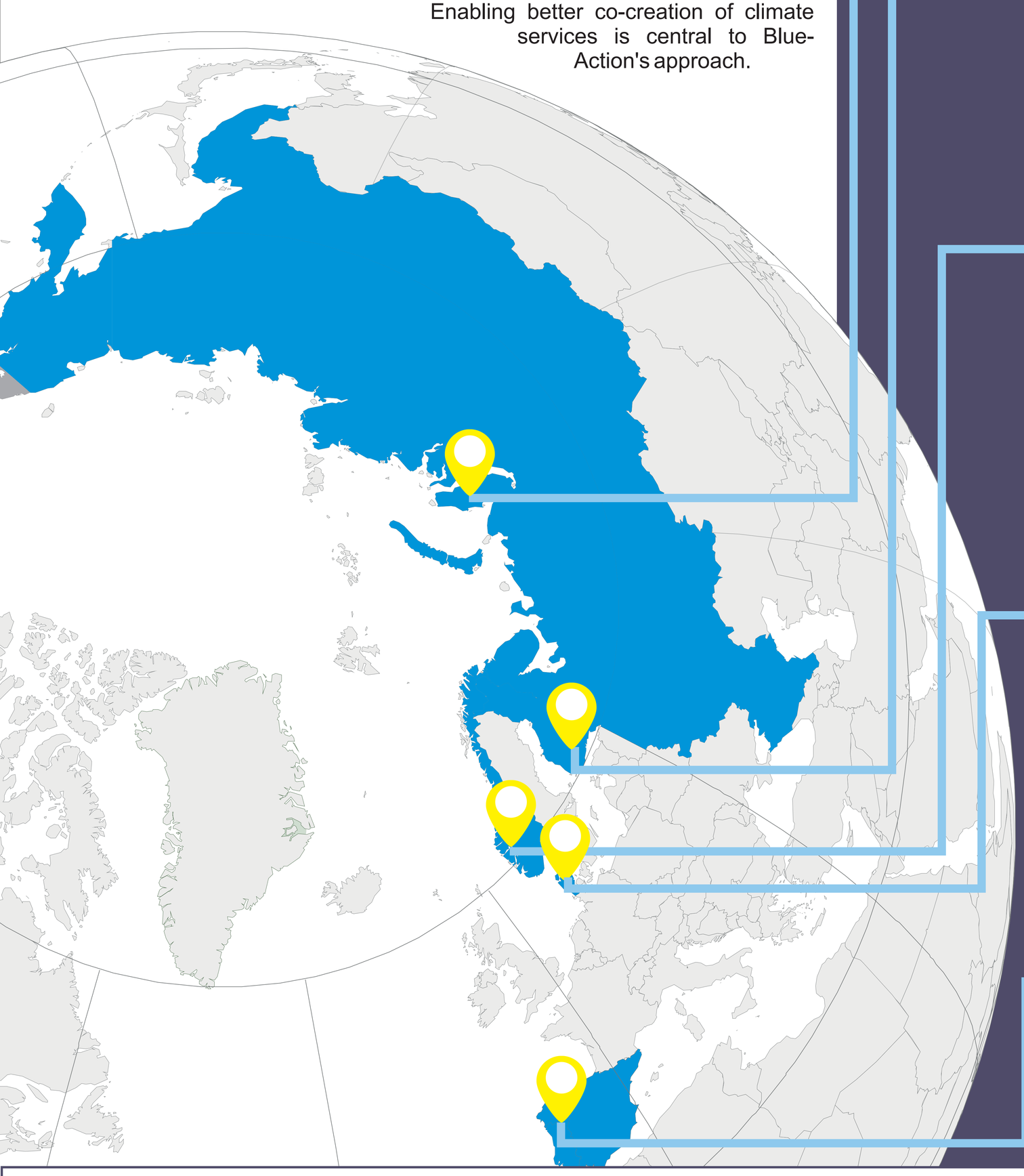
In an increasingly globalized world, decision-makers from all sectors need to access improved climate and weather information across regional boundaries to address forthcoming social and economic challenges posed by a changing climate.

Why Blue-Action?

The Blue-Action project aims to deliver improved modelling, prediction, and forecasting of Arctic climate change and its impact on Northern Hemisphere climate, weather, and extreme weather events, in line with stakeholder needs.

Activities across the academic, business, policy, and public communities are often disconnected, or follow a linear, 'scientist-tells-end-user' pathway, limiting opportunities for true co-creation of outcomes and real innovation. With this in mind, Blue-Action brings together trans-disciplinary teams covering the entire pathway from earth observation and modelling to businesses and local communities to focus on developing new effective, and scalable services based on cutting-edge climate science.

Enabling better co-creation of climate services is central to Blue-Action's approach.



Climate Service Case Studies

Oil & Gas development in the Russian Arctic

Developing & evaluating scenarios for resource extraction in the Russian Arctic to enable evidence-based decision-making at various levels of governance and across spatial scales.

Image: TECHLIFT UK

Lead Partner: Institute for Advanced Sustainability Studies
Other Partners: Institute of World Economy and International Relations, Foresight Intelligence

Weather & climate data for winter tourism

Assessing the value of improved weather and climate predictions for short-term and mid-term planning of operations for ski centres in Northern Finland.

Image: Ruka / P Lesser

Lead Partner: Arctic Centre of the University of Lapland
Other Partners: Rukakeskus Oy (Ruka ski centre)

Forecasting polar lows

Forecasting wintertime cold air outbreaks from polar ice to open water and associated dangerous weather features such as polar lows, to limit risks of humans, business activities, and the environment in the Arctic.

Image: J.C. Dahl

Lead partner: UNI RESEARCH AS
Other partners: DNV GL Norway

Climate services for marine fisheries

Developing and operationalizing annual and multi-annual fisheries-related prediction, and estimating their value to specific industry end-users, as well as the sector overall.

Image: SAMS

Lead Partner: Technical University of Denmark: DTU AQUA
Other Partners: Faroe Marine Research Institute, Pelagic Freezer-trawler Association, Danish Pelagic Producers Organisation

Forecasting temperature-related mortality

Developing a forecast scheme for temperature-related mortality for an ensemble of regions in Europe, and evaluating how climate forecast skill is transferred to the predictability of climate impacts on human health.

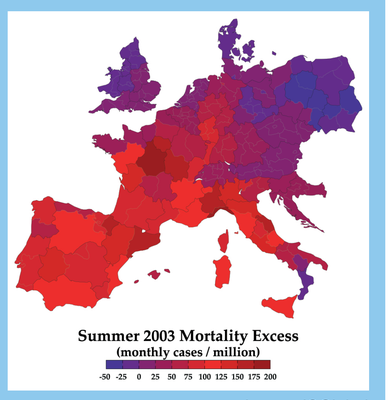


Image: ISGlobal

Lead Partner: Barcelona Institute for Global Health
Other Partners: Almada City Council

[1]Raeanne.Miller@sams.ac.uk, *SAMS Research Services Ltd., Oban, Scotland*
[2]*Danmarks Tekniske Universitet, Lyngby, Denmark*
[3]*Institute for Advanced Sustainability Studies, Potsdam, Germany*
[4]*UNI RESEARCH AS, Bergen, Norway*
[5]*Barcelona Institute for Global Health (ISGlobal), Barcelona, Spain*
[6]*Arctic Centre of the University of Lapland, Lapin Yliopisto, Rovaniemi, Finland*
[7]*Climate-KIC ApS, Copenhagen, Denmark*

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