

HOW TO GET INVOLVED

Blue-Action aims to work with:

- Researchers and projects focussing on Arctic and northern hemisphere observing, climate modelling, forecasting, and climate services.
- Governments and policymakers in need of weather and climate information for evidence-based decision-making.
- NGOs, public sector bodies, and community organisations interested in extreme weather events, climate services, forecasting, and climate change.
- Businesses or industries who rely on seasonal to decadal climate predictions, risk estimates of extreme weather, and understanding climate events, or who would like to work with Blue-Action to co-develop climate services and tools.

Contact us

 @BG10Blueaction

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www.blue-action.eu

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BLUE ACTION

Arctic Impact on Weather and Climate

UNDERSTANDING THE IMPACT OF A CHANGING ARCTIC ON NORTHERN HEMISPHERE WEATHER AND CLIMATE.

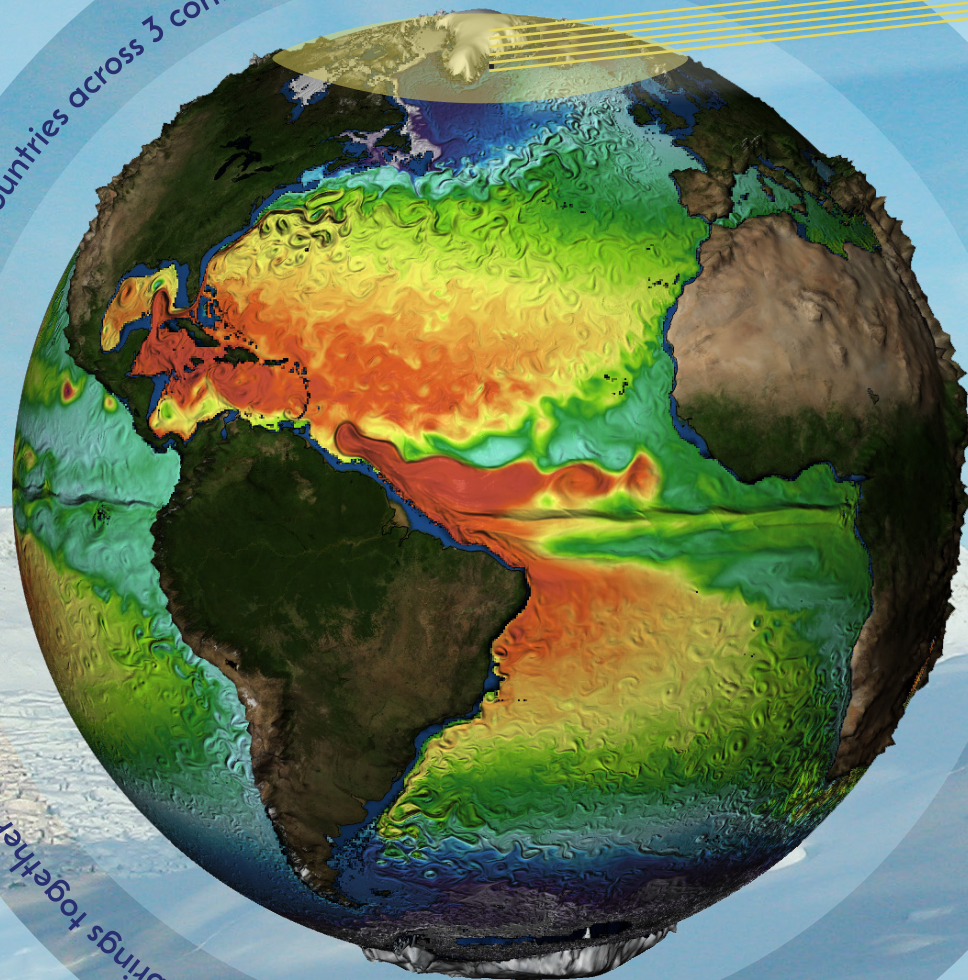
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PROJECT SUMMARY

Faced with a changing climate, businesses, policymakers, and local communities need to access reliable weather and climate information to safeguard human health, wellbeing, economic growth, and environmental sustainability. However, important changes in climate variability and extreme weather events are difficult to pinpoint and account for in existing modelling and forecasting tools. Moreover, many changes in the global climate are linked to the Arctic, where climate change is occurring rapidly, making weather and climate prediction a considerable challenge.

Blue-Action will evaluate the impact of Arctic warming on the northern hemisphere and develop new techniques to improve forecast accuracy at sub-seasonal to decadal scales. Blue-Action will specifically work to understand and simulate the linkages between the Arctic and the global climate system, and Arctic's role in generating weather patterns associated with hazardous conditions and climatic extremes. In doing so, Blue-Action aims to improve the safety and wellbeing of people in Arctic and across the Northern Hemisphere, to reduce the risks associated with Arctic operations and resource exploitation, and to support evidence-based decision-making by policymakers worldwide.

Blue-Action brings together experts from over 40 organisations in 17 countries across 3 continents



OUTPUTS & OUTCOMES

Deliver an improved representation of Arctic warming and its impact on atmosphere and ocean circulation.

Develop new methods to characterise climate conditions where hazardous weather system forms across the Northern Hemisphere and establish their link to Arctic climate change.

Enable robust and reliable forecasting to deliver better predictions at sub-seasonal to decadal scales.

Embed scientific developments and improved model capability within international programmes through organisations including Copernicus C3S, WCRO, IPCC (AR6), JPI Climate and WMO (YOPP & PPP).

Co-design a series of case studies with organisations and industries that rely on accurate weather and climate forecasting, to apply new modelling techniques to cutting-edge climate services.

Communicate new insights, results, and messages – as well as data, model improvements and storylines – to a community of stakeholders for whom understanding climate change and associated environmental trends and risks is imperative.