

A joint initiative of GIOS and SIOS

GIOS – Greenland Integrated Observing System

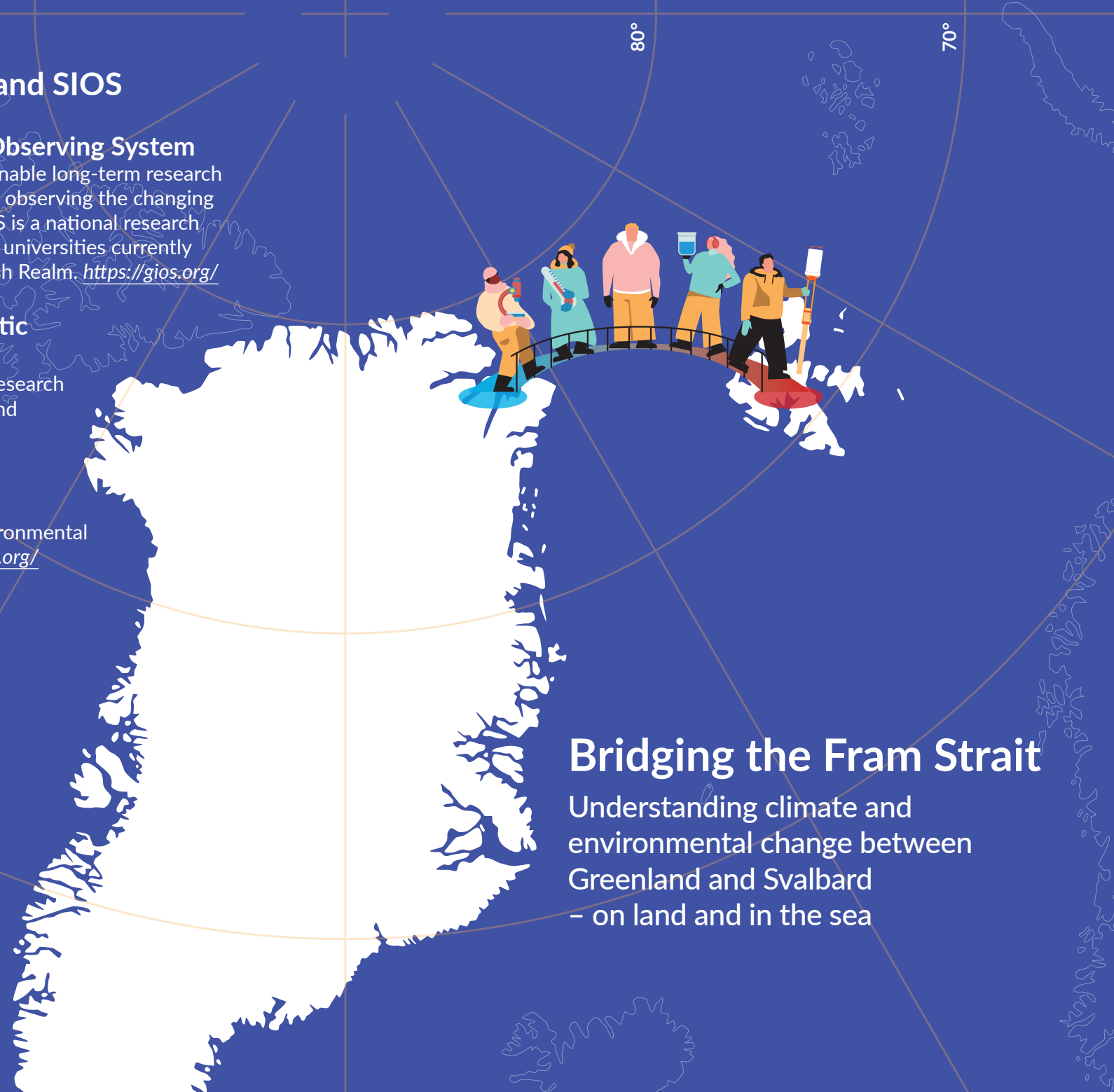
GIOS is a coordinated network of sustainable long-term research infrastructures in and around Greenland observing the changing air, ice, land, and ocean conditions. GIOS is a national research infrastructure linking all institutions and universities currently carrying out Arctic research in the Danish Realm. <https://gios.org/>

SIOS – Svalbard Integrated Arctic Earth Observing System

SIOS is an international partnership of research institutions studying the environment and climate in and around the Norwegian archipelago of Svalbard. SIOS develops an efficient observing system, shares technology, experience and data, closes knowledge gaps and decreases the environmental footprint of science. <https://sios-svalbard.org/>

Ready to get involved?

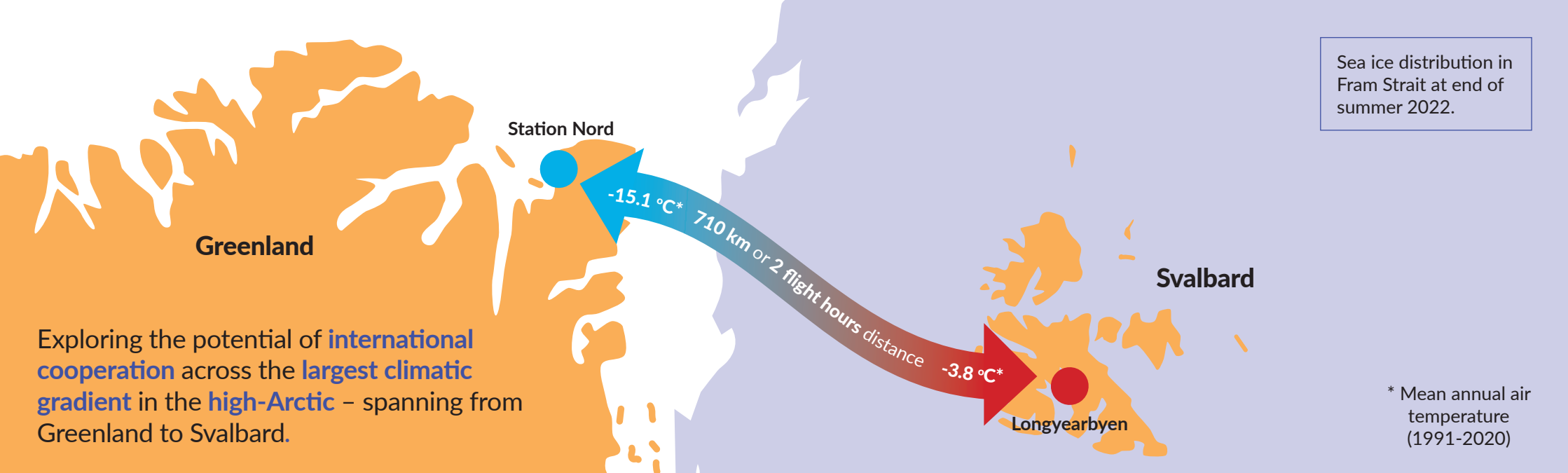
Contact information@sios-svalbard.org



Bridging the Fram Strait

Understanding climate and environmental change between Greenland and Svalbard – on land and in the sea

Sea ice distribution in Fram Strait at end of summer 2022.



Exploring the potential of **international cooperation** across the **largest climatic gradient** in the **high-Arctic** – spanning from Greenland to Svalbard.

* Mean annual air temperature (1991-2020)



Photo: Peter Schmidt Mikkelsen

Photo: Søren Rysgaard

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Photo: SvalPOPs KKosek

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THE REGION

There is a strong air temperature gradient from cold Northeast Greenland to a warm Svalbard - can present observations in Svalbard be used to predict future processes in Greenland?

Long-term data series from both sides of the Fram Strait can be integrated to answer key research questions.

Two regional observing systems - GIOS and SIOS - work together to better understand Earth system changes in an area that largely affects the global climate.

SCIENCE

Develop research projects covering the entire gradient.

Establish common data protocols linking GIOS and SIOS data portals for integrated use of data from Greenland and Svalbard.

Joint science papers, conference sessions, proposals, and sample archives.

RESEARCH INFRASTRUCTURE & LOGISTICS

Cooperate on research infrastructure and logistics.

Coordinate fieldwork and larger campaigns.

Exchange information between data portals and logistics platforms.

HIGHER EDUCATION

Develop a master's degree programme that uses the entire climatic gradient to train the next generation of Arctic experts.

Establish an inter-university campus by integrating existing courses at relevant universities into a regional study portfolio.

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