

# National activities of importance to SAON

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# Selected initiatives of the Kingdom of Denmark

## Institutions

- Danish Meteorological Institute (DMI)
- Geological Survey of Denmark and Greenland
- ASIAQ Greenland Survey
- Universities and research institutions

## Programmes

- Greenland Ecosystem Monitoring
- PROMICE

## Portals

- Polar Portal
- ISAAFFIK

# Danish Meteorological Institute (DMI)

Many lines of research at the DMI are centered around the Arctic. DMI is responsible for forecasting the weather, ocean, ice and wave conditions for Greenland, and thus runs numerical weather, ocean-ice and wave prediction models for Greenland and provides official forecasts. DMI participates in a number of climate studies in the Arctic, including coupled atmosphere-ice sheet modelling as well as ocean and sea ice studies with focus on Greenland fjords, the surrounding waters and the Arctic Ocean.

Website: <http://research.dmi.dk/research/research-topics/arctic/>

# Geological Survey of Denmark and Greenland (GEUS)

The Geological Survey of Denmark and Greenland (GEUS) is an internationally oriented, independent research and advisory institution within the Danish Ministry of Energy, Utilities and Climate.

GEUS carries out activities to exploit and protect geological resources in Denmark and Greenland. Primary activities are mapping, compilation and storage of data, research, monitoring and consultancy within water, energy, minerals and climate and environment. This includes research and technology development in relation to administration of legislation.

GEUS also undertakes assignments related to energy, minerals, water, climate and the environment on a contractual basis for other public authorities, research agencies, private companies and clients outside Denmark.

Website: <https://eng.geus.dk/>

# ASIAQ Greenland Survey

ASIAQ Greenland Survey undertakes surveys and research projects, based on non-living physical data from the environment in Greenland.

The data are derived from; mapping of cities and non-urban areas, measuring of water resources, climate monitoring, soil testing, surveying and stakeouts at construction projects. All these, provides a unique knowledge of the arctic climate, soil conditions, water resources and topography of Greenland, which makes possible for the Greenlandic society, partners, and costumers to plan and exploit the physical environment and resources.

Website: <http://www.asiaq.gl>

# Universities and research institutions

Among others:

- University of Copenhagen ([www.ku.dk](http://www.ku.dk))
- Aarhus University ([www.au.dk](http://www.au.dk))
- University of Southern Denmark ([www.sdu.dk](http://www.sdu.dk))
- Aalborg University ([www.aau.dk](http://www.aau.dk))
- Technical University of Denmark ([www.dtu.dk](http://www.dtu.dk))
- Greenland Institute of Natural Resources ([www.natur.gl](http://www.natur.gl))
- University of Greenland ([www.uni.gl](http://www.uni.gl))
- University of Faroe Islands ([www.setur.fo](http://www.setur.fo))
- Faroe Marine Research Institute ([www.hav.fo](http://www.hav.fo))

# Greenland Ecosystem Monitoring

Greenland Ecosystem Monitoring (GEM) is an integrated monitoring and long-term research programme on ecosystems and climate change effects and feedbacks in the Arctic. Since 1994 the programme has established a coherent and integrated understanding of the functioning of ecosystems in a highly variable climate, which is based upon a comprehensive, long-term inter-disciplinary data collection carried out by Danish and Greenlandic monitoring and research institutions, primarily at the two main field stations: Nuuk in low arctic West Greenland and Zackenberg in high arctic Northeast Greenland.

Website: <http://g-e-m.dk>

# PROMICE

In 2007, Denmark launched the Programme for Monitoring of the Greenland Ice Sheet (PROMICE) to assess changes in the mass balance of the ice sheet. The two major contributors to the ice sheet mass loss are surface melt and a larger production of icebergs through faster ice flow. PROMICE is focused on both processes. Ice movement and discharge is tracked by satellites and GPSs. The surface mass balance is monitored by a network of weather stations in the melt zone of the ice sheet, providing ground truth data to calibrate mass budget models.

Website: <http://www.promice.dk/>



# Polar Portal

On polarportal.org, Danish research institutions display the results of their monitoring of the Greenland Ice Sheet and the sea ice in the Arctic.

The main purpose of the site is to make updated information from this monitoring available to the general public, both nationally and internationally. In addition, the site will provide access to scientifically based information resources.

Website: <http://polarportal.dk/en/home/>

# ISAAFFIK

Isaaffik is the Greenlandic word for gateway. ISAAFFIK Arctic Gateway is a user driven web platform supporting research and collaboration.

Whether you are a scientist, student, administrator, decision maker, politician, service provider or something else, ISAAFFIK is your tool to:

- Provide overview of Arctic infrastructure and who's working with what, where and when
- Help you save money on your Arctic travel budget
- Facilitate collaboration of research, education, consultancy, infrastructure, and logistics
- Increase your safety during fieldwork by making your projects visible to authorities and other parties
- Give you an overview of Arctic courses and educational programs available

Website: <https://www.isaaffik.org/>

