

**FRAM** – High North  
Research Centre for Climate  
and the Environment

*Through collaboration we create high  
quality interdisciplinary research with  
importance to the management of the High  
North.*

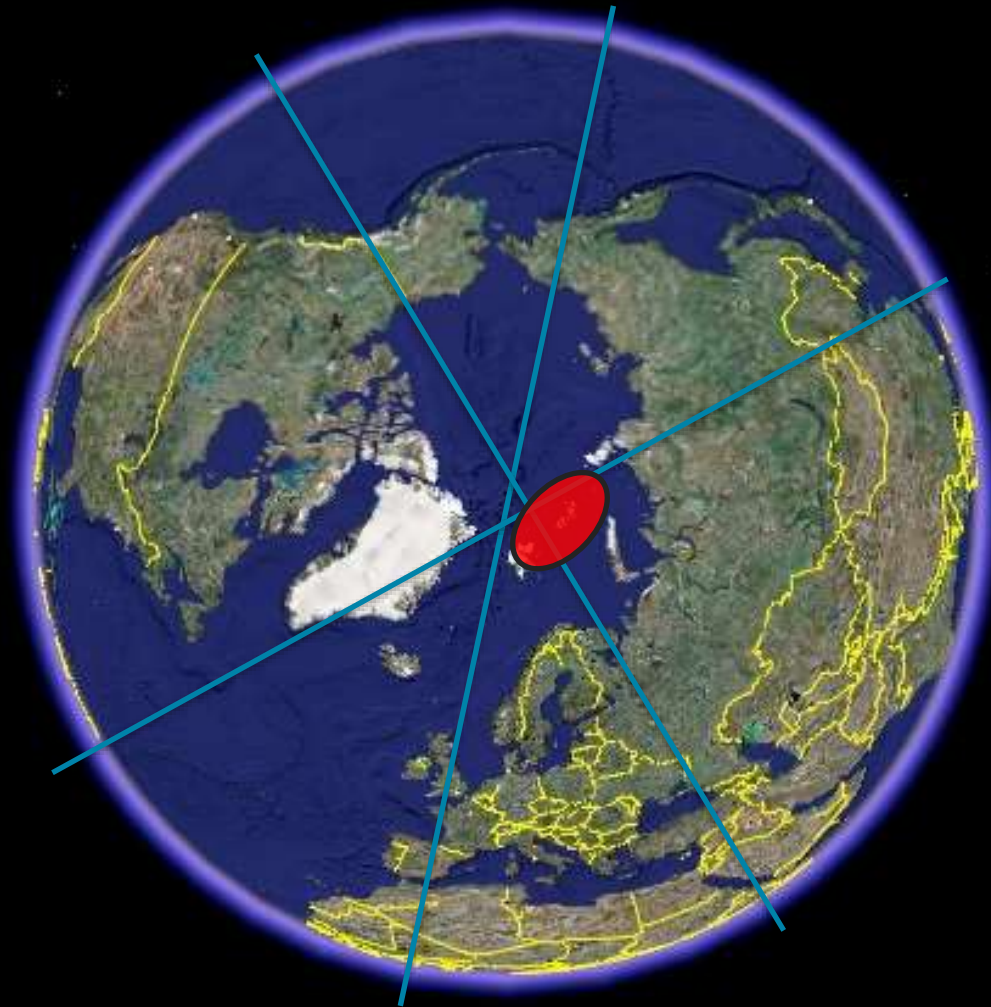
## The Fram Centre is the name of several entities

---

- This building
- The limited company running the building and supporting the science collaboration, Framsenderet Drift A/S
- Fram Centre collaborating science collaboration between 21 institutions

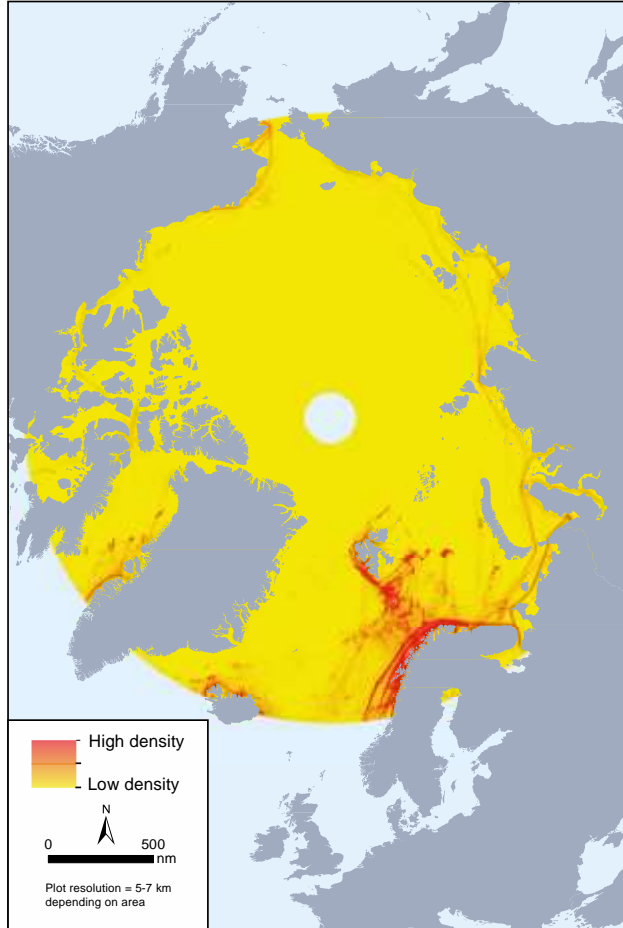




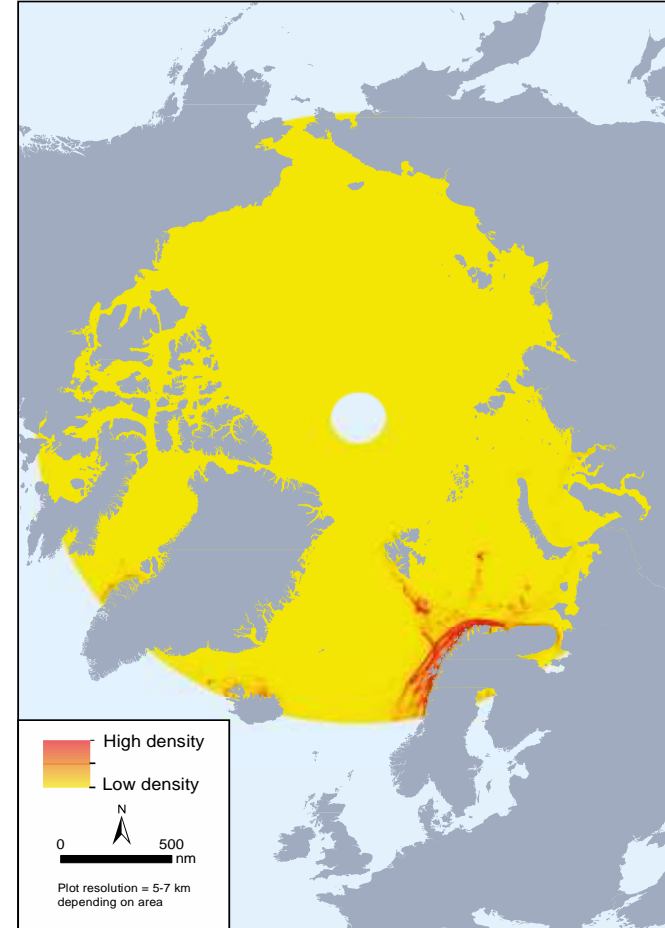


# Norwegian areas dominate Arctic vessel traffic

Polar basin: 2011.06.01 - 2011.10.31



Polar basin: 2010.11.01 - 2011.05.31



## Fram Centre members 2021

- Akvaplan-niva<sup>F</sup>
- CICERO - Centre for International Climate Environmental Research
- Institute of Marine Research<sup>f</sup>
- Geological Survey of Norway
- Nofima – The Norwegian Institute of Food, Fisheries and Aquaculture Research<sup>T</sup>
- Norwegian Coastal Administration<sup>f</sup>
- NORCE<sup>f</sup>
- Norwegian Institute of Bioeconomy Research
- Norwegian Institute for Air Research<sup>f</sup>
- Norwegian Institute for Nature Research<sup>f</sup>
- Norwegian Institute for Cultural Heritage Research<sup>f</sup>
- Norwegian Institute for Water Research
- Norwegian Mapping Authority
- Norwegian Polar Institute<sup>F</sup>
- Norwegian Radiation and Nuclear Protection Authority<sup>f</sup>
- Norwegian Veterinary Institute
- SINTEF Group
- UiT The Arctic University of Norway<sup>T</sup>
- UNIS – The University Centre in Svalbard
- Associated member: Polaria

17 of the members have significant presence in Tromsø

# Fram Centre – Flagship research areas (2010-2021)



Hazardous substances  
– effects on ecosystems  
and human health



Effects of climate change on terrestrial  
ecosystems,  
landscapes society and  
indigenous peoples



Ocean acidification and  
ecosystem effects in  
Northern waters



Environmental impact of  
development in the  
North



Sea ice in the Arctic  
Ocean, technology and  
agreements



Plastic in the Arctic



Effects of climate  
change on sea and  
coastal ecology in the  
north



## Fram Center collaboration 2010-2020

---

- Successful scientific collaboration with 500 MNOK funding creating additionally equal external funds.
- But, the collaboration needs a new steering structure, better incorporation of social sciences as well as better coupling to management requirements.





## Fram Center collaboration 2021-2025

---

- New steering form with a steering group answering directly to the ministry..
- A new strategy has been developed emphasizing:
  - Research should be in the areas that require collaboration between the member.
  - Interdisciplinary research is required, including fields outside the natural sciences.
  - The research shall have importance for a better management of the Northern Areas.
  - User needs shall be incorporated.

## New Research Areas

- **Environmental changes in the Arctic Ocean**
- **Overall impact and multi-stress in the High North ecosystem**
- **Areas under pressure and sustainable development**
- **Climate change and other impacts on the links between terrestrial and aquatic ecosystems**
- **New tools for research in the north**



Applications are currently being externally evaluated

## Conclusion

---



- *All members do important research individually with budgets vastly surpassing the collaborative efforts.*
- *The collaboration shall create additional research that is important for a better management of the North and that:*
  - *Requires collaboration between the Members*
  - *Is interdisciplinary*
  - *Involves the users*
- *The utilization of space data is a necessity for most of the research*

