



ARCTIC RESEARCH CENTRE (ARC)  
AARHUS UNIVERSITY  
<http://arctic.au.dk>



# ARCTIC SCIENCE PARTHERSHIP

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# July 2012 – ASP cooperation





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# ARCTIC SCIENCE PARTNERSHIP (ASP)

## Vision

**The Arctic Science Partnership will be a leading consortium on climate, cryosphere, ecosystems, and human interactions through research, monitoring and education.**

## Mission

**To facilitate and integrate active scientific cooperation between the ASP and its members.**

## Strategies

- Joint projects, field campaigns, workshops
- Sharing facilities (labs, instruments, field stations, logistics, ships)
- Joint positions (staff, technicians, students, visiting scientists)
- Joint observatories and data sharing
- Joint publications and acknowledgements
- Education, outreach and capacity building in the Arctic
- Collaborative work on industry relevant assessments
- Development of new environmental Arctic technologies
- Information dissemination



## Research questions to be answered:

1. What controls change in; i) snow, sea ice area extent and thickness? ii) the glacier-sea ice-ocean interactions? iii) the permafrost thaw and the associated atmosphere-land interactions?
2. What controls the marine and atmospheric transport of pollutants to the Arctic?
3. What are the consequences of these changes for i) biogeochemical cycling and ocean-sea ice-land-snow-atmosphere fluxes, ii) ecosystem ecology, structure and function? iii) chemical contaminants affecting ecosystems and human health?
4. How can proxies of paleoclimate/ecology inform us of changes in ocean current and wind systems and future Arctic climates and their ecological consequences?
5. What will be the combined effects of natural and anthropogenic forcing on ecosystems, their services and industrial development on human living and health?
6. Follow-up studies on the impact of the transition and environmental changes on the Arctic population's lifestyle and changes in disease patterns.
7. What are the feedbacks between the Arctic and Earth climate system?





## ARCTIC SCIENCE PARTNERSHIP




> CENTRE FOR EARTH OBSERVATION SCIENCE (CEOS)
> GREENLAND CLIMATE RESEARCH CENTRE (GCRC)
> ARCTIC RESEARCH CENTRE (ARC)

**NEWS & EVENTS**

- > Calendar
- > Fieldwork
- > Meetings
- > Seminars
- > Conferences
- > Workshops
- > Employment

**RESEARCH**

**EDUCATION**

**COMMUNICATION**

**ABOUT ASP**

**CONTACT ASP**

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CENTRE FOR EARTH OBSERVATION SCIENCE (CEOS)

GREENLAND CLIMATE RESEARCH CENTRE (GCRC)

ARCTIC RESEARCH CENTRE (ARC)

**THE ARCTIC SCIENCE PARTNERSHIP**

is a new and extensive Greenlandic-Danish-Canadian research collaboration, bringing together the world's leading Arctic climate scientists.



**EXPLORE THE ARCTIC**

Click on the icons below to track shipping routes, observe the movement of the ice caps, and discover what ASP is learning about the changing Arctic.  
(Please feel free to rewrite this.)






**ARCTIC IMAGES**



THE LANDSCAPE



THE RESEARCH



THE PEOPLE

**ASP NEWS & EVENTS**

- UPDATED Short excerpt with a link
- Short excerpt with a link
- EVENT 1 Short blurb Short blurb Short blurb Short blurb
- EVENT 2 Short blurb Short blurb Short blurb Short blurb
- Short excerpt with a link

**TWITTER FEED**

**TWEET 1**  
Short blurb Short blurb Short blurb Short blurb

**TWEET 2**  
Short blurb Short blurb Short blurb Short blurb

**TWEET 3**  
Short blurb Short blurb Short blurb Short blurb

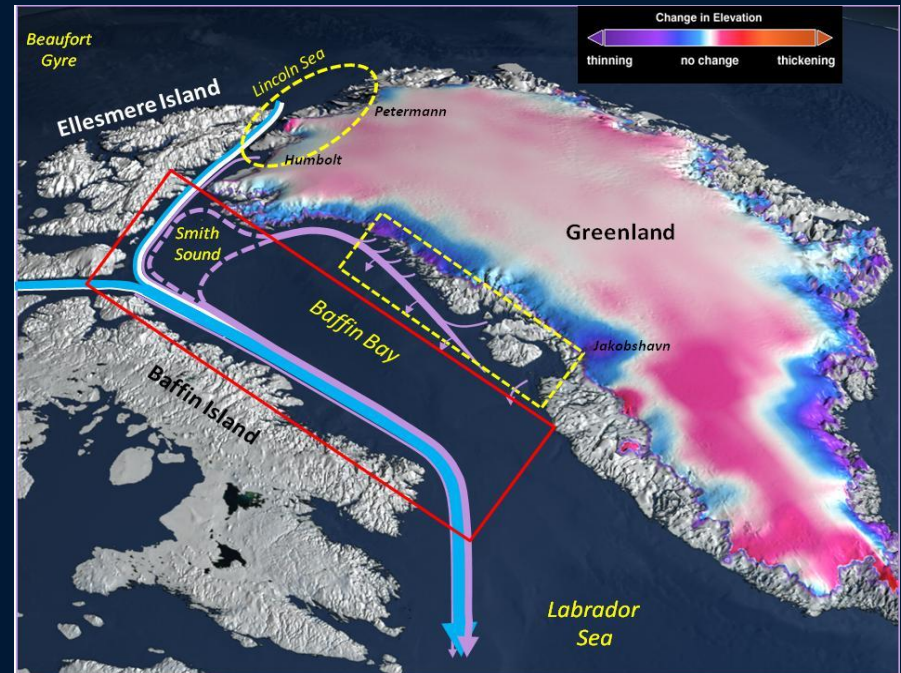
**ASP VIDEOS**



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# RESEARCH FOCUS 2012-2020







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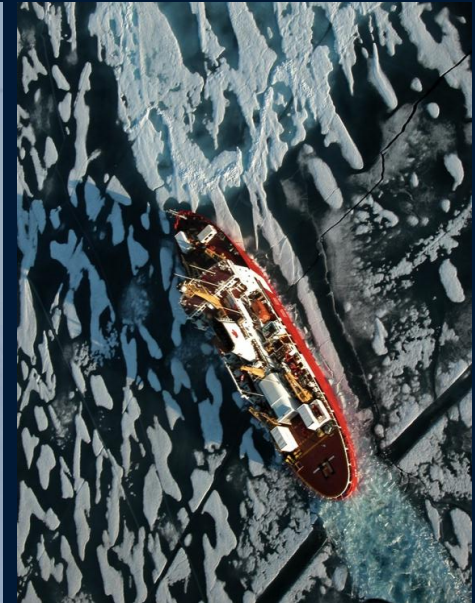






# SMALL TO LARGE SCALES

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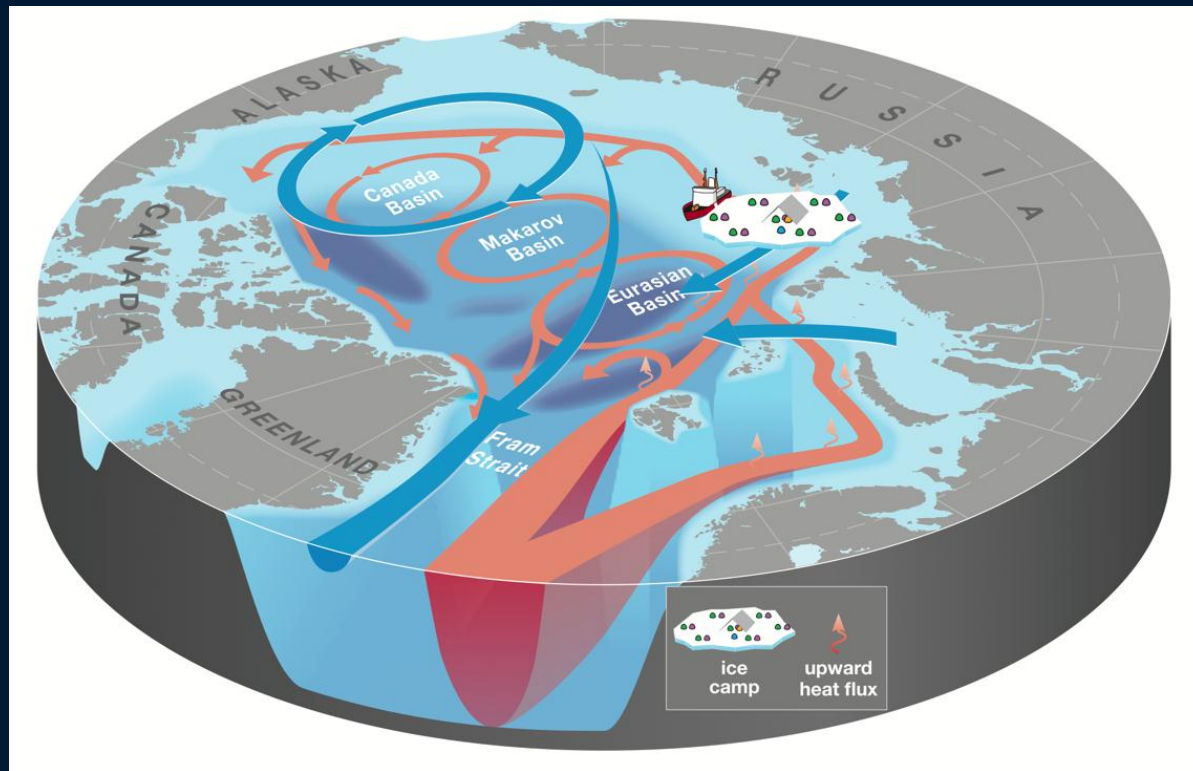
# godthåbsfjorden

- Climate gradients
- Ice bergs
- Melt water
- Contaminants
- Food chains
- Health
- Mega industries





# ARCTIC OCEAN DRIFT STUDY





# EDUCATION

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- › Build new natural science and medicine educations in the Arctic





## Canada continues the IPY generated momentum:!



New Polar Class Icebreaker(s)!



Canadian High Arctic Research Station!