

OVERVIEW /application no.	2010-01	2010-02	2010-03	2010-04
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Cruiseleader	Camilla Snowman Andresen	Henrik Fossing, Dr., Head of Section, Senior Scientist, National Environmental Research Institute, Aarhus University, Vejlsovej 25, POB 314, DK-8600 Silkeborg, +45 89 20 17 50; hfo@dmu.dk	Professor Torkel Gissel Nielsen	Andy Visser, Morten Holtegaard
Consortium (institutions)	GEUS, AU	AU, GEUS, SDU, MPI	DTU Aqua, AU, SAMS, GCRC	DCH
Cruise name	SEDIMICE fieldwork 2010	Aarhus Bay Cruise 2010	Biological Oceanography of Fyllas Bank-Godthåbsfjorden	Transit cruise field course
Project name	Linking sediments with ice-sheet response and glacier retreat in Southeast Greenland	Biogeochemistry, microbiology and stratigraphy of Holocene sediments in Aarhus Bay	Arctic plankton dynamics – in a changing climate	
Cruise/project acronym	SEDIMICE-2010	ABC-2010	BOFYGO	
Cruise objectives	Retrieving sediment cores from Sermilik Fjord and the shelf off Tasiilaq in Southeast Greenland in order to reconstruct palaeoclimatic and past ocean variability in the region. Coring will be conducted from the vessel M/V Fox with a gravity corer using a mobile winch with 1500 meter wire.	The major objective is to acquire undisturbed continuous sediment cores ranging from the sediment-water interface to the base of the Holocene deposits (at 11-15 m below seafloor) at several stations in Århus Bay.	The major aims of the cruise is 1) to examine important bio-physical linkages in the frontal systems off the important fishing Banks along South Western Greenland, and 2) to evaluate the general hydrographic influence, especially the impact of the icecap freshwater outflow, on the structure, composition and production of the pelagic food web in Godthåbfjord.	This course is designed in part to give students a sea-going experience and practical introduction to ocean sampling. Key elements will include the use of a CTD and rosette water sampler - perhaps the most important instrument in modern oceanographic measurement. Additional instruments (e.g. TRIAXUS, ADCP, "Ferry Box" and acoustic systems) and techniques for determining salinity, chlorophyll concentrations, light attenuation, and plankton sampling.
Geographical area	Sermilik Fjord (East Greenland) and the shelf adjacent to the mouth of the fjord. The whole cruise will take place in coastal waters of the Greenland offshore sector.	Århus Bay, Denmark	Fylla Bank just off Nuuk along a transect trough the Godthåbfjord to the ice cap in the innermost part of the Fjord.	The ships preferred route from Tromsø to Nuuk, and preferred route from Nuuk to Hirthals
Preferred ship	The Faroese research vessel M/V Fox (34 m long - a former fishery vessel) will be platform for the planned marine geological work (sediment coring).	Susanne A", IMO no. 9099183, a "multipurpose salvage diving support vessel". 54 m, with space for a laboratory container, and a suitable crane capacity and large deck space to operate a 15 m gravity corer.	Dana	Dana
Preferred period	Transit: 30/7-1/8 (3 days) Work: 2/8- 5/8 (4 days) Transit: 6/8- 8/8 (3 days)	May 3-7, 2010, preferably Monday to Wednesday.	Cruise on location (Nuuk to Nuuk) from June 6. to June 23, 2010.	28 May to 5 June 2010, 24 June to 1 July 2010

Operation type	Retrieving sediment material with a gravity and box corer from water depths down to 1000 m. Gravity corer handled with a mobile winch driven by a power pack. Sediment cores of 3-5 m cut into c. 1.5 meter pieces for easier handling. No analyses onboard ship. Only daytime work.	Ship-board operation will be daytime only out of Århus Harbor. Primarily gravity coring from the aft deck while the ship is held on position dynamically.	Oceanographic research using smaller gears for hydrographic measurements and biological sampling. The basic operations will be conducted primarily during daytime, but at the intensive study areas part of the work will be done around the clock. Approx half of cruise time will be 24 h work.	Operations limited to weather and time permitting activities, e.g. CTD, Triaxus, Multinet, etc).
Cruise participants	3 pax	18 pax	22 pax	23 pax and 19 pax
Harbour of em- and disembarkment	Tinitelaq in Sermilik Fjord by Tasiilaq (Southeast Greenland).	Århus - Århus	All equipment will be embarked in Hirtshals before the preceding cruise to the Norwegian Sea. Cruise participants will embark and disembark in Nuuk, Greenland.	Tromsø-Nuuk and Nuuk-Hirtshals
Requested funding	DKK 297.000	DKK 209.100	DKK 2.751.000	DKK 2.400.000