

OVERVIEW /application no.	2012-01	2012-02	2012-03	2012-04	2012-05
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Cruiseleader	Colin A. Stedmon	Caterina Morigi	Camilla Snowman Andresen	Dr. John Fleng Steffensen	Tove Nielsen
Consortium (institutions)	DMU, KU, DTU Aqua, DMI, Texas A& M University,	GEUS, AU, University of Barcelona, University of Bremen, Istituto Nazionale di Oceanografia e di Geofisica Sperimentale, Institut de Ciències del Mar	GEUS, AU	KU, University Tromsø, Indiana University South Bend, Virginia Institute of Marine Science, DTU	GEUS, University of Tromsø, Greenland Institute of Natural Resources
Cruise name	North Atlantic-Arctic Ocean coupling: Deepwater overflows and surface water outflows	Ice dynamics and meltwater deposits: coring in the Kveithola trough, NW Barents Sea	SEDIMICE fieldwork 2011	Biology of marine fishes of North East Greenland 2012.	Marine Permagas
Project name	North Atlantic-Arctic coupling in a changing climate: impacts on ocean circulation, carbon cycling and sea-ice (NAACOS).	Ice dynamics and meltwater deposits: coring in the Kveithola trough, NW Barents Sea - DK	Linking sediments with ice-sheet response and glacier retreat in Southeast Greenland	Biology of marine fishes of North East Greenland.	Impact on permafrost, gashydrates and periglacial processes following climate changes in Greenland (Permagas)
Cruise/project acronym	Cruise: NAAO, Project: NAACOS	CORIBAR / CORIBAR-DK	SEDIMICE-2011	FishGreen	Magas
Cruise objectives	This cruise is planned as an essential part of the Danish contribution to oceanographic fieldwork as part of the NAACOS project (2011-2014), funded by the Strategic Research Council. The main objectives of the cruise are to obtain a comprehensive suite of physical, chemical and biological oceanographic measurements across the East Greenland shelf. The data collected on this cruise will form the basis of validating and improving circulation and ecological models in the region.	1) reconstructing the chronology of the west Barents Sea paleo-ice streams retreat during the Late Pleistocene; 2) reconstructing the sea-ice history with regard to changes in marine productivity and deep-water formation processes; 3) understanding the sedimentation dynamics at the neighbouring continental slope in response to meltwater discharge and ice-stream history; and 4) investigating the sedimentation dynamics on the continental slopes in response to the cyclic sediment deposition induced by glacial maxima and deglacial retreats.	The primary goal is to obtain sediment cores from the vicinity of major outlet glaciers in Southeast Greenland. By analysing the sediment composition and rate (by thorough 210Pb dating) the relative variability in the calving rates from these glaciers can be reconstructed during the past years. By analysing the (possible) content of microfossils and the content of biomarkers the relative variability in water mass properties can be reconstructed.	Parts of two scientific on-going projects will be carried on the suggested cruise: 1: Biology of Greenland sharks. The project will examine methods to reduce by-catch in the long-line fisheries using electropositive metal. Behavior and thermal preferences as well as position will be determined using satellite pop-up-tags (Desert Star). 2: TUNU-Mafig – Marine Fishes of North East Greenland – diversity and adaptation	The objective of the cruise is to map and sample methane found in the sub-seabed sediments as free gas and gashydrates, or seeping in to the water column.
Geographical area		The working area is under the jurisdiction of Norway, within the Exclusive Economic Zone	Bernstorff fjord, Gyldenløve Fjord and Køge Bugt (Southeast Greenland) as well as Sermilik Fjord. The whole cruise will take place in coastal waters of the Greenland offshore sector.	Fjords in North East Greenland from Scoresbysund in the south (70 15 N, 21 47 E) to Kejsers Franz Joseph Fjord in the north (74 N, 20 E) and offshore to maximum 1000 meters depth.	Offshore central West Greenland
Preferred ship	DANA	R/V MARIA S. MERIAN, youngest member of the German research fleet.	The vessel Erik den Røde (25 m long)	Dana, alternatively R/V Jan Mayen from Tromsø University	Paamiut
Preferred period	August/September 2012	28.5 days, in summer season (July – August)	Transit: 6/8-7/8 (2 days) Work: 8/8- 19/8 (12 days) Transit: 20/8- 21/8 (2 days)	18 days (including 2 * 5 days in transit) ultimo August to ultimo September 2011 or 2012	Primo June 2012 in order to meet the needs of Paamiut's annual shrimp monitoring cruise. Alternatives: last week of August - first week of September Expected days of working: 5 days Expected days of transit: 2 days

Operation type	The majority of the sampling will be profiling carried out using the CTD and Niskin rosette. Vertical plankton net trawls will also be carried out at a selection of stations. Online surface water intake measurements will be taken with continual measurements of CO2 partial pressure taken in combination with the standard online CTD/oxygen/chlorophyll measurements.	Box core: (alternatively multi-core) in order to recover the intact sediment-water interface. Gravity core and MeBo cores. Daily procedures based on 24 h work. Requesting money for equipment and travel.	Retrieving sediment material with a Rumohr- and multicorer from water depths down to 750 m. Corers handled with the ship-winch. Sediment cores of 1-2 m. No analyses onboard ship. Daytime work only.	The basic operations will include fishing with trawl and longlines at depths up to 1200 meters as well as CTD-profiles from the fishing stations.	Basis operations: Shallow seismic survey, Echo sounding, CTD, sediment coring and seabed sampling. Daily procedure: 24-hour work. Seismic and acoustic acquisition during night times and sediment sampling and oceanographic measurements in day times
Cruise participants Harbour of em- and disembarkment	14 pax Reykjavik Tromsø	23 pax Tromsø, Norway	4 pax Tasiilaq (Southeast Greenland).	20 pax Hirtshals/Iceland or Scoresbysund alternatively Longyearbyen (R/V Jan Mayen)	12 pax Nuuk, Greenland
Requested funding	kr 2.192.800	kr 516.000	kr 122.000	kr 2.520.000	kr 955.800