PROJECT SUMMARY REPORT - 2016 BAFFIN BAY SANNA CAMPAIGN

Subproject: The Baffin Bay System Study

Actual field dates: 11 – 31 August 2016
Field site: NW Greenland
Number of man-days in the field: 21 days of each participant, total of 189 days

Summary:
During the cruise a total of 55 stations were visited in 5 different fjords including fjords with both land and marine terminating glaciers. Seven oceanographic moorings were deployed along the coast from Nuuk to Melville Bay. Ideal weather conditions permitted sampling relatively close to two glacial fronts thus providing very promising data on ocean-glacier dynamics in Greenland fjords. Samples and data from the cruise will now be processed and eventually be discussed at a workshop in ARC. A preliminary outline of the general topics that will be addressed is:
A. Microscale turbulence and vertical mixing of nitrate
B. Primary production and the influence of glacial melt water
C. Parameterization of the light climate in Greenland fjords
D. Bacterial production and the influence of glacial carbon
E. Zooplankton biomass and species composition
F. Spatiotemporal variability of Atlantic water in nearshore waters of West Greenland
G. Oxygen, carbon and nitrogen dynamics of marine sediments

Figure 1

Figure 2

Figure 3

Photos:
Fig.1: The research team in front of the eqip sermia glacier. Credit: Tage Dalsgaard
Fig. 2: Ice bergs in Greenland. Credit: Tage Dalsgaard
Fig. 3: R/V Sanna navigating in glacial ice. Credit: Tage Dalsgaard

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