PROJECT SUMMARY REPORT - 2016 SERF CAMPAIGN

Subproject: Carbonate system (DIC, TA, pH) and phosphate evolution during sea ice growth and decay

Actual field dates: January 15 – February 8, 2016
Field site: Sea-ice Environmental Research Facility (SERF), University of Manitoba, Winnipeg (Canada)
Number of man-days in the field: 17

Summary:

During this SERF experiment, we did sampling for frost flower, sea ice and seawater following the complete cycle of sea ice formation and decay from 'open water' to an ice thickness of ~20 cm and then 'open water' again.

With the samples collected, we should be able to have a better understanding of the impact of sea ice on the carbonate system, or more specifically, how the sea ice affects CO_2 flux between atmosphere and seawater. All the samples have now been analyzed and we are working on the data processing and writing papers.

Photos:

Fig.1: A sunny day with David Binnie at SERF Credit: Yubin Hu
Fig. 2: Ice coring over the bridge. Credit: Feiyue Wang
Fig. 3: Ice core temperature measurements. Credit: Feiyue Wang

Participants:

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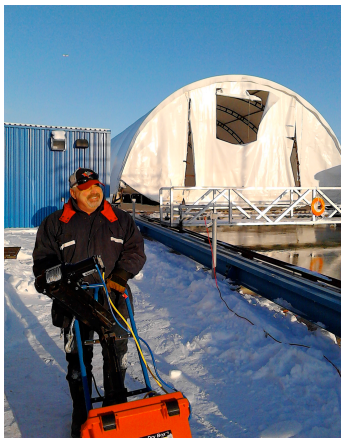

Figure 1

Figure 2

Figure 3