

TITLE: Sediment_trap_best_2008_2009_2010

AUTHORS:

Rolf Gradinger, Katrin Iken, Bodil Bluhm
University of Alaska Fairbanks
School of Fisheries and Ocean Sciences
Fairbanks AK 99775-7220
rrgradinger@alaska.edu
907 474 7407

FUNDING SOURCE AND GRANT NO:

National Science Foundation Award Number 0732767.

Description:

This file contains data on the vertical flux of algal pigments and particulate organic nitrogen (PON) and carbon (POC) under sea ice in the Bering Sea. Traps (KC-Demark # 28.050) were deployed under the ice in various depths (typically 5 and 20 m) during the BEST 2008 (HLY0802), 2009 (HLY0901, HLY0902) and 2010 (PSEA10-01) field studies. After retrieval, samples were split for analysis of algal pigments (chlorophyll a, phaeophytin a; Arar and Collins 1997) and PON, as well as POC (at UAF Stable Isotope facility). For details on the expeditions as well as station locations check the cruise reports available at <http://www.eol.ucar.edu/projects/best/>. The data are in a standard excel format spreadsheet.

Description of columns

Cruise: Identifies cruise during which sediment traps were deployed

Station: Contains the official name of the station as given in the station catalog.

Date: Date of sampling. Format: MM/DD/YY

Depth (m): Water depth of sediment trap deployment.

Chl ($\text{mg m}^{-2} \text{d}^{-1}$): Sinking flux of chlorophyll a. n/d indicates values that were not determined.

Phaeo ($\text{mg m}^{-2} \text{d}^{-1}$): Sinking flux of phaeophytin a. n/d indicates values that were not determined.

PON ($\text{mg m}^{-2} \text{d}^{-1}$): Sinking flux of PON

POC ($\text{mg m}^{-2} \text{d}^{-1}$): Sinking flux of POC

Reference:

Arar EJ, Collins GB. 1997. Method 445.0. in vitro determination of chlorophyll a and phaeophytin a in marine and freshwater by fluorescence. EPA Report, National Exposure Research Laboratory Office of Research and Development. U.S. Environmental Protection Agency, Cincinnati, Ohio