TITLE: **HLY1301FAM\_Macroinfaunal taxa\_README.docx**

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ORIGINAL AWARD TITLE: Chukchi Sea Offshore Monitoring in Drilling Area (COMIDA): Hanna Shoal

DATA ARCHIVE: COMIDA Hanna Shoal (HS), <http://arcticstudies.org/index.html>

DATASET OVERVIEW:This dataset contains benthic macroinfaunal population level from sediment collected at each station for HLY1301, identified by station number (#), Station name (Stn. Name), Date (mm/dd/yy), latitude (°N), longitude (°W), and station depth (m). The following macroinfaunal parameters were determined: abundance, wet weight biomass (g/m2), dry weight biomass (gC/m2), and taxon type.

INSTRUMENT DESCRIPTION:A van Veen grab (0.1 m2 sediment grab), weighted with 32 kg of lead was used in the collection of sediment samples for macroinfaunal collections.

DATA COLLECTION AND PROCESSING

On average, four successful grabs were sieved on a 1 mm screen and macroinfauna collected and package in plastic containers with preservation in 10% seawater formalin, buffered with hexamethylenetetramine. The number of replicates collected at each station is provided in the data set. Infauna were sorted, counted, and weighed (wet weight) to the family level at the Chesapeake Biological Laboratory. The dry weight biomass was calculated from published carbon conversion values (Stoker 1978, Grebmeier et al. 1989). The “X” values next to the taxa names means that this taxa was excluded from summary analyses since we exclude meiofauna (foraminifera, nematodes) and motile macroinfauna (e.g., motile gastropods, and encrusting epibenthos (e.g., bryozoans) from our further statistical analyses. Bracketed taxon names [ ] indicate a prior name used in time series analyses before updated taxa name changes. The carbon biomass was calculated from published carbon conversion values (Stoker 1978, Grebmeier et al. 1989). Samples were subsequently archived in 50% propanol.

DATA FORMAT

File Names (Formats): **HLY1301FAM\_Macroinfaunal taxa.xlsx** is an excel file

Data Parameters:

Cruise-Ship, Year, Cruise # =HLY1301 (HLY=USCGC Healy)

Station Number - sequentially numbered from beginning to end of cruiseStation Name - based on transect names

Number of grabs/stn=number of replicate grabs collected at each station

Latitude-decimal degrees

Longitude-decimal degrees

Date - mm/dd/yy

Gear code - van Veen grab

Gear size - 0.1 m2 van Veen grab

Station Depth - bottom station depth in metersAbundance - abundance of each taxa type in number per m2

Wet Weight – Wet weight of each taxa type in g wet wt/m2

Carbon Biomass – Carbon dry weight of each taxa type in gC/m2 using conversion factor for each taxa

Taxon code-10 digit NODC taxon code

Family-taxon name associated with 20 digit NODC taxon code

Data Version Number and Date: Version 1, 10/3/2016Software Compatibility: This dataset will be posted in Microsoft Excel.

REFERENCES

Grebmeier, J. M., Howard M. Feder and C. Peter McRoy (1989), Pelagic-benthic coupling on the shelf of the northern Bering and Chukchi Seas. II. Benthic community structure, Marine Ecology Progress Series, 51, 253-268.

Stoker, S. W. (1978), Benthic invertebrate macrofauna of the eastern continental shelf of the Bering/Chukchi Seas., Ph.D. thesis, University of Alaska Fairbanks.