DATA MANAGEMENT PLAN

Data Policy Compliance: NSF requires investigators to provide data within two years of collection. If the project is funded, the field data from the program will be submitted to Palmer LTER's DataZoo data repository

(http://oceaninformatics.ucsd.edu/datazoo/data/pallter/datasets) and to BCO-DMO (https://www.bco-dmo.org/). Dr. Stukel oversee data archiving in DataZoo. He has previously provided data to DataZoo as part of his work with the CCE LTER program (http://oceaninformatics.ucsd.edu/datazoo/data/ccelter/datasets), where he has been responsible for sediment trap and ²³⁴Th datasets.

During the Cruise Geo- and temporal-referenced event logs are kept both in paper and digital forms on the Palmer LTER cruises. Sampling and analytical protocols will be logged in the cruise report.

Post-Cruise Metadata for each sampling activity will be collated into a single file, updated following each cruise, and supplied to DataZoo. ²³⁴Th data will be supplied to DataZoo within three months of mass spec analysis necessary for quantification of yield. This data will be merged with appropriate metadata so that it is in a usable format, both by PI's and collaborators. When annual reports are submitted, the data specific to this project (including new data and data updates) will be provided to DataZoo. PI Stukel has an established track record of timely submission of ²³⁴Th data to multiple data repositories including Palmer LTER DataZoo:

(https://oceaninformatics.ucsd.edu/datazoo/catalogs/pallter/datasets/275), CCE LTER DataZoo: https://oceaninformatics.ucsd.edu/datazoo/catalogs/ccelter/datasets/222 and BCO-DMO: https://www.bco-dmo.org/dataset/516062. For this project, two different types of datasets will be uploaded. The first dataset will include all of the ²³⁴Th water column and surface underway samples, along with metadata and associated data including date, time, location, depth, temperature, salinity, etc. The second ²³⁴Th data set will focus on vertically-integrated results (at multiple integration depths including mixed layer, euphotic zone, 50 m and 100 m) and quantified fluxes (e.g., ²³⁴Th flux and C flux). This vertically-integrated data set will include ²³⁴Th activity (with uncertainty), ²³⁴Th deficiency (with uncertainty), estimated C:²³⁴Th ratio (with uncertainty), no-advection model ²³⁴Th flux (with analytical uncertainty and model uncertainty), advection model ²³⁴Th flux (with analytical uncertainty and model uncertainty), carbon flux (with uncertainty for both models). The vertically-integrated dataset will also include associated biological and physical data. To ensure that data is available to the widest possible set of users these datasets will be deposited in both the Palmer LTER DataZoo repository and BCO-DMO.

Permanent Archive of Data When the archive timeline is triggered, DataZoo staff will submit the data we have supplied to the appropriate archival site such as the National Ocean Data Center.