DATA MANAGEMENT PLAN

Submission of Computer Code to BCO-DMO

The computer code for the estimation of rate constants of particle cycling in the ocean water column from field measurements, which will be developed during this project, will be submitted to the Biological and Chemical Oceanography Data Management Office (BCO-DMO). This office was created to serve PIs funded by the NSF Geosciences Directorate (GEO) Division of Ocean Sciences (OCE) Biological and Chemical Oceanography Programs and Office of Polar Programs (OPP) Antarctic Sciences (ANT) Organisms & Ecosystems Program. BCO-DMO manages and serves oceanographic biogeochemical, ecological, and companion physical data and information developed in the course of scientific research and contributed by the originating investigators. In particular, BCO-DMO archives computer codes (personal communication from BCO-DMO Data Manager Cyndy Chandler; cchandler@whoi.edu). The BCO-DMO data system facilitates data stewardship, dissemination, and storage on short and intermediate time-frames. Their main objective is to support the scientific community through improved access to ocean science data. The BCO-DMO manages existing and new data sets from individual scientific investigators and collaborative groups of investigators, and makes these available via any standard web browser. More information about BCO-DMO is available at

http://bcodmo.org/home

The computed code to be developed during our project and to be archived at BCO-DMO will allow chemical oceanographers to incorporate their own measurements into the estimation problem, to evaluate the extent to which these measurements reduce the uncertainties in the estimated rate constants compared to those obtained from previous measurements, and hence to guide future observing strategies. As part of our project, a document will be written, which will explain how to use the computer code for the estimation of the rate constants of particle cycling at oceanic stations. This document will be submitted to BCO-DMO jointly with the computer code.

Note that the PI of this project (O. Marchal) has a record of archiving models developed in the framework of NSF-funded projects (award OCE-0524927, *Inverse Modeling of the Glacial Ocean*, PIs: Olivier Marchal and William Curry). The computer code developed for this previous project has been archived at the National Climatic Data Center (NCDC) of the National Oceanic and Atmospheric Administration (NOAA) and is publicly available at

http://www.ncdc.noaa.gov/paleo/softlib/softlib.html