Data Management Plan

A cruise is proposed on the R/V *Neil Armstrong* during which CTD casts will be made and standard chemical, biological, and physical oceanographic data will be collected via the CTD sensor package. Datasets will include but are not necessarily limited to: salinity, temperature, pressure, chlorophyll fluorescence, photosynthetically available radiation, oxygen. Detailed plans for CTD station locations, instrument deployment, water sampling strategy and water sample allocation will be written up as a science implementation plan for the cruise. The actual sampling events will be recorded on the Rolling Deck to Repository (R2R) ELOG scientific event logger system. The Van Mooy lab was one of the very first users of this system on a cruise aboard the R/V *Knorr*. This system greatly streamlines the uploading of CTD data to the Biological and Chemical Oceanography Data Management Office (BCO-DMO) website, were it is immediately accessible to cruise participants and the broader scientific community. In the case of our *Knorr* cruise, CTD data was published and freely available to the public in less than two months (http://mapservice.bco-dmo.org/mapserver/maps-ol/index.php?datasetId=14056). The original underway data will be contributed by the vessel operator to the UNOLS central data repository (http://www.rvdata.us/catalog/) managed by R2R. Also, R2R will ensure that the original underway measurements will be archived permanently at National Ocean Data Center (NODC) and/or National Geophysical Data Center (NGDC) as appropriate for the data type. Additional water column biogeochemical measurements made by the science party will be managed by the BCO-DMO and will be available online from the BCO-DMO data system (http://bco-dmo.org/data/). Full descriptions of methods and standards will be provided to BCO-DMO upon submission of datasets. The BCO-DMO will also archive all the data they manage at the appropriate national archive facility, such as NODC and NGDC. Experiments will also be conducted during the cruise and at the Van Mooy Laboratory at WHOI. The results from these experiments will be made available through peer-reviewed, open-access publications. Raw data will be included as supplementary material to these publications when applicable. In addition, all experimental data will be posted to the Woods Hole Open Access Server (WHOAS; http://darchive.mblwhoilibrary.org/), which is a repository for data collected by the Woods Hole scientific community. Here, datasets will be issued a permanent, citable URL that will be maintained in perpetuity.

Every attempt will be made to make all data available to the general public as expeditiously as possible (i.e. as soon as quality-control and documentation can be completed); given the unique focus of the proposed project we see no need to maintain any embargo on data.

Samples will also be taken during the course of this project: seawater, particulate matter, sinking particles. Most of these samples will be destroyed in the course of our planned analyses, but any excess pristine samples will be preserved and maintained for future analysis by interested parties for two years after the project is completed.