

Data management plan

Types of data

This proposal seeks funding for a project that is entirely experimental, involving culture work and experiments on cell cultures. Numerous parameters will be measured or estimated, consisting of the following: growth rates of algae, heterotrophic bacteria, nitrifying bacteria and protists; grazing rates of protists; ammonium, nitrite, N₂O, DON and PON concentrations and associated $\delta^{15}\text{N}$; organism-level isotope effects; transport isotope effects; ammonium consumption rates by different organisms; nitrite and N₂O production rates by nitrifiers; and enzymatic isotope effects of glutamate synthetase.

Data archiving

For this proposal Granger will be responsible for coordinating data submission with BCO-DMO (*Biological & Chemical Oceanography Data Management Office*) at Woods Hole. If the project is funded, as a first step we will submit a data inventory form to the data archive. The primary data will consist of those listed above associated with particular incubations and experiments, including all analytical data pertaining to the derivation of rate processes and of specific isotope effects. Metadata for each of type of incubation and analytical measurements will be collated into a single file. Once per year, when annual reports are submitted, the data specific to this project (including new data and any updates/corrections of previously submitted data) will be provided to the BCO-DMO. Upon completion of the project, the *final* data will be archived with BCO-DMO.

Data sharing

Presentations and peer-reviewed publications resulting from the proposed work will be documented on the Granger Laboratory web site. Archived primary data will become available to interested parties at BCO-DMO upon completion of the project as specified to NSF.