

Data Management Plan. This plan provides for the preservation, documentation, and sharing of data collections, curriculum materials, and other related research and education products. It follows the guidance provided in NSF-04-004 OCE Data and Sample Policy. We will use two primary repositories for our data that will be managed by Litvin with the help of Woodson and Monismith at Stanford University. Oceanographic data will be housed and managed on a server as part of the Kelp Forest Array and at the Monterey Bay Aquarium Research Institute through the Central and Northern California Ocean Observing System (CeNCOOS). Data directly relevant to the project will be replicated and made available through a secure FTP server in the Environmental Fluid Mechanics Lab at Stanford University. Access to the data for this project will be provided to all PIs, researchers, post-docs, students, and technicians involved in the project via a secure logon.

Data Archival. We will employ the methods of the Digital Library Format to build the metadata and to interoperate with the metadata requirements of the National Geophysical Data Center (NGDC) and the National Ocean Data Center (NODC) as required. The NODC has four methods of metadata submission (<http://www.nodc.noaa.gov/General/NODC-Submit/>) and we will evaluate them to choose the most appropriate method for our data. We will also communicate with staff at the NGDC to determine an appropriate method for submitting data to them. Metadata and other information covering this project will be made available to the scientific community, as necessary, through the NODC and BCO-DMO. Educational materials will be managed and hosted on sites maintained by Stanford University through the Center for Ocean Solutions.

Data Publication. In addition to data archival, we propose to publish the derived and synthetic data products produced by this project under scientific editorial control. This includes quality control of the data and the production of published data objects with assigned digital object identifiers (DOIs) and the registration of those DOIs with the CrossRef (<http://crossref.org>) system. Metadata for these objects will provide provenance to the source data and attribute the contributions of those source material.

Data Access. Data access will be through the data repositories listed above (NODC, BCO-DMO) and additionally provided through contact with the coordinating PI.