Plan Overview

A Data Management Plan created using DMPTool

Title: Florida Reef Tract NCC and NCP 2009-2010

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The project investigators will comply with the data management and dissemination policies described in the *NSF Award and Administration Guide* (AAG, Chapter VI.D.4) and the *NSF Division of Ocean Sciences Sample and Data Policy*.

Question not answered.

It may be useful to group data into four categories:

- (1) Observational (e.g. in-situ, collected in the field). Examples may include: shipboard underway data; mesozooplankton samples collected by a net system; copepod specimens collected, identified, and preserved; hydrographic casts; alongtrack data; remote sensing (e.g. ocean color); acoustic data.
- (2) Experimental (e.g. generated in a lab or under controlled conditions). Examples: controlled carbonate chemistry experiments; DNA and RNA sequences.
- (3) Simulations (e.g. machine-generated). Example: models and their output.
- (4) Derived (e.g. synthesized from existing datasets). Examples: compiled database, products, reports.

If the expected dates or duration of collection are not known at this time (e.g. due to funding schedules or ship availability), it is appropriate to give approximations, the ideal dates/duration, or to state that these details will be determined at a later date.

Usually, data served by BCO-DMO are submitted as comma- or tab-separated ASCII files (.csv, .txt) or as spreadsheet files (.xls, .xlsx). However, BCO-DMO is flexible and willing to work with whatever reasonably organized format the investigator uses.

The investigators will store project data (including spreadsheets, ASCII files, images, and PDFs of scanned logs) on laboratory computers that are backed up by the University's central IT organization. The Principal Investigator (PI) has also established an account with the San Diego Super Computer's enterprise class Cloud Service for data storage and sharing among project investigators. Personal computers in all laboratories are backed up daily using Apple Time Machine to an onsite external hard drive, and weekly to an offsite hard drive.

Immediately after completion of the research cruise, underway data and metadata will be submitted to the Rolling Deck to Repository (R2R) project. DNA sequences will be deposited in the National Center for Biotechnology Information (NCBI) database GenBank upon submission of manuscripts. GenBank accession numbers will be provided to the Biological and Chemical Oceanography Data Management Office (BCO-DMO) in an Excel spreadsheet or .CSV file and metadata will be provided using the BCO-DMO Dataset Metadata submission form. Data sets produced by the science party will be made available through the BCO-DMO data system within two-years from the date of collection. The project investigators will work with BCO-DMO data managers to make project data available online in compliance with the NSF OCE Sample and Data Policy. Data, samples, and other information collected under this project can be made publically available without restriction once submitted to the public repositories.

Data produced by this project may be of interest to chemical and biological oceanographers, and climate scientists interested in the role of biogeochemistry in the global climate system. We will adhere to and promote the standards, policies, and provisions for data and metadata submission, access, re-use, distribution, and ownership as prescribed by the BCO-DMO Terms of Use (http://www.bco-dmo.org/terms-use).

R2R will ensure that the original underway measurements are archived permanently at NODC and/or NGDC as appropriate. BCO-DMO will also ensure that project data are submitted to the appropriate national data archive. The PI will work with R2R and BCO-DMO to ensure data are archived appropriately and that proper and complete documentation are archived along with the data.

Each PI will be responsible for sharing his/her subset of data among the project participants in a timely fashion. J. Doe will be responsible for collecting and analyzing the zooplankton sampling data. P. Smith will oversee the molecular biology work and will submit the resulting sequences to the National Center for Biotechnology Information's (NCBI) GenBank database. The Lead PI, R. Jones, will coordinate the overall data management and sharing process and will submit the project data, including GenBank accession numbers, and metadata to the Biological and Chemical Oceanography Data Management Office (BCO-DMO) who will be responsible for forwarding these data and metadata to the appropriate national archive.
