Data Management Plan

1) **Types of data, samples, software, curriculum materials and other materials produced.**
   (a) **Physical collections** will include an array of fluid and sediment samples including sediment samples, pore fluid samples, and water column samples. We note that many of the fluid samples will be completely consumed to maximize the Nd isotope signal. Remaining sediment samples will be stored either at BLOS or Oregon State University
   (b) **Metadata and primary data** will include location information and other relevant hydrographic information (e.g., available from the CTD). Pore fluid ancillary concentration data include major nutrients, cations, and anions as well as REE data and Nd isotope data.
   (c) **Geochemical model databases** will consist of REE surface complexation model databases in the "FeOH.tdat" format of the Geochemist's Workbench® for the Hawaii station sediment, and a more general version specific to goethite. These will be included as supplementary files with published papers. The "FeOH.tdat" format can be readily changed to the earlier "FeOH.dat" format by simply resaving the file. In addition, pore water REE reactive transport models will consist of text scripts in the "*.X1t" format of Geochemist's Workbench®. These will also be included in publications as supplementary files.

2) **Standards used for data and metadata.**
   (a) Data will be tabulated to include all metadata. Standard statistical results for geological and oceanographic standard reference materials and isotope standards will be included for all measurements.
   (b) Isotope data will be tabulated and normalized to internationally accepted isotope standards together with relevant quality control data.

3) **Plans for archiving data.** Following NSF guidelines, all the data collected for this study will be made available in a timely fashion through public archival resources.
   (a) We plan to publish the complete data tables from this work, including all ancillary data. We intend to place these data within electronic appendices associated with the appropriate papers.
   (b) In addition, as some of these data will be closely aligned to the GEOTRACES program we will explore the possibility of archiving these data within that electronic database.
   (c) We also plan on making these data available through SedDB (www.seddb.org), BCO-DMO, PANGEA or, NOAA-NCDC Paleoclimate Data Center. All SCM databases and reactive transport model scripts in the appropriate Geochemist's Workbench® format will be archived and available to interested researchers.