

Data Management Plan

This proposal requests funds to support participation on a cruise planned for year 1 of the award period. The participants will adhere to all NSF-OCE and GEOTRACES data policies on the dissemination and sharing of research results as detailed in this proposal supplement.

Pre-Cruise

The PIs will conduct regular videoconferences and participate in workshops for planning purposes. The PIs will also communicate with the cruise management team and contribute to the science implementation plan as required. BCO-DMO (Cyndi Chandler) has been consulted regarding data management and the data sets will be available online from the BCO-DMO data system (<http://bco-dmo.org/data/>).

Table 1. Instrumentation, samples produced, and analytical responsibility for U.S. GEOTRACES Eastern Pacific section

Instrumentation	Sample Produced	Purpose	Investigator
US GEOTRACES Aerosol Sampler	12 bulk aerosol samples on W41 filters	Soluble major ions, archival, and community distribution (total and SW soluble parameters)	Aguilar-Islas Buck
US GEOTRACES Slotted Impactor Aerosol Sampler	5 size-fractionated aerosol samples on QMA filters	Soluble major ions, soluble TEIs, community distribution	Buck
US GEOTRACES Rainfall Samplers (2)	Event based un-/filtered samples	Soluble/Total ions & TEIs, community distribution	Buck
Aguilar-Islas Aerosol Sampler	13 bulk aerosol samples on W41 filters	UHP soluble TEIs SW soluble TEIs, Total TEIs, Fe redox speciation and size-fractionation of SW soluble Fe	Aguilar-Islas Buck

During Cruise

All sampling events related to this work (e.g. rain events, aerosol sampling, towed-fish sampling, GOFlo sampling, aerosol extractions, etc.) will be recorded into a digital log and compiled into a cruise report. Sampling and processing protocols will follow published procedures (Buck et al., 2006; Aguilar-Islas et al., 2010). Underway data will be contributed by the vessel operator to the UNOLS central data repository at <http://www.rvdata.us/catalog/> managed by the Rolling Deck to Repository (R2R) project. These data will be archived permanently at NODC.

Post-Cruise

All sample analyses will occur after the completion of the cruise following procedures outlined in this proposal and published in Buck et al. (2006) and Aguilar-Islas et al. (2010) Milne et al., (2010). All data and metadata will be submitted in a timely fashion to BCO-DMO. BCO-DMO will archive the data for long-term storage at NODC. Research partners receiving aerosol and/or rainfall subsamples have been advised to contact BCO-DMO and submit their own data management plan. These groups will be provided with electronic data reports which will contain all metadata generated for this project (Table 2). The shared metadata will allow for easy association of the various aerosol datasets.

Table 2. Example metadata to be provided to BCO-DMO and all collaborators receiving aerosol and/or rainfall subsamples. Parameter definitions will be provided on a separate worksheet.

Data Set Information															
Contact Name	Clifton S. Buck, cliftonsuck@gmail.com														
Address	Florida State University, EOAS, Tallahassee, FL 32306														
PI Name	Ana Aguilar-Islas, University of Alaska, Fairbanks														
Co_PI Name	Clifton Buck, Florida State University														
Co_PI Name	William Landing, Florida State University														
Dataset Name															
Dataset Description															
Funding															
Ship															
Cruise_ID															
Cruise_Track															
Location															
Data_Centre	BCO-DMO, NODC														
Data_Publication(s)															
Sampler_Locate															
Sampler_Type															
Sampler_average Flow															
Substrate_Type															
Substrate_Pretreat															
Size_Seg_Method															
Method_Publication															
Access Restrictions															
Sample Specific Information															
Sample #	Julian Day	Start Day	Start Month	Start Year	Start Time UTC	Start Lat	Start Long	End Day	End Month	End Year	End Time	End Lat	End Long	Sampled Air/Rain_Vol.	Collection Time

Quality Flag Codes: Please use the following codes in the Quality Flag columns to indicate any data quality concerns including any values substituted for cases below the detection limit. You may use other codes, if you wish, but please define them in the spreadsheet.

BDL - below detection limit (include description of how these values are dealt with in cell C23, **DATA** sheet)
 ADL - concentration in excess of value
 C - contamination suspected
 FDV - Filters damaged, value considered valid
 FDI - Filters damaged, value considered invalid
 NS - No sample taken