

# **SCICEX boat-to-archive route map and data management template**

## **Biological and Chemical Samples**

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SCICEX data management can be thought of in four parts:

Part 1. On the submarine

**\*\*Part 1B. Transfer from submarine to laboratory\*\***

Part 2. Transition from ASL to archive

Part 3. At the archive

Use these slides to define Part 2, Transition from ASL to archive, for those data than concern you.

**Start: Data from a SAM are at ASL**

# First, please *define the data products*

What is a good, lasting, descriptive name for the data collection? One example might be “SCICEX Ocean Conductivity, Temperature and Depth (XCTD) Profiles, 1995”. It would be the name for all SCICEX 1995 cruise XCTD data. *Please insert a suggested name for the data that concern you.*

A good name for hydrography (XCTD) data would be: *XCTD*

A good name for hydrography (sail mounted CTD) data would be: *Underway*

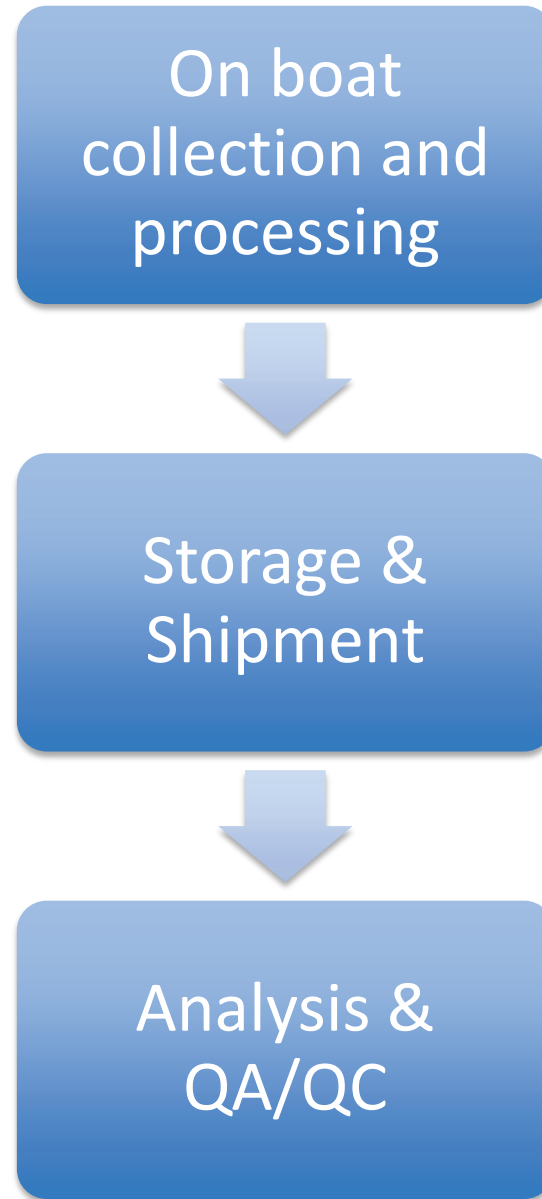
A good name for water chemistry & biology data would be: *discrete samples*

*1) Calibrations for underway data; 2) Tracers; 3) Dissolved & Particulate Pools*

*(Inorganic Nutrients, Carbonate System, Oxygen, Dissolved Organics, Particulate*

*Pools); 4) Phytoplankton and Bacteria Characterization & Enumeration; 5) Other*

# Sample flow for Chemistry & Biology



For transitions processes, need to define *who* handles the data, *what* happens to the data, and *how* it happens.

# Sample flow for Chemistry & Biology

On boat  
collection and  
processing



Storage &  
Shipment



Analysis &  
QA/QC

Bremerton – Hector Castillo  
Groton – Charles Johnson

# Sample flow for Chemistry & Biology

On boat  
collection and  
processing

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graph TD; A[On boat collection and processing] --> B[Storage & Shipment]; B --> C[Analysis & QA/QC];
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Bremerton – Hector Castillo  
Groton – Charles Johnson

Storage &  
Shipment

Individual labs.

Analysis &  
QA/QC

# Sample flow for Chemistry & Biology

On boat  
collection and  
processing



Bremerton – Hector Castillo  
Groton – Charles Johnson

Storage &  
Shipment



Individual labs.

Analysis &  
QA/QC

→ To ASL

**Finish:** The SAM cruise data are at NSIDC or NGDC, and in good shape for NSIDC to begin Part 3. Data management at the archive.

Required resources are probably small for transfer to NSIDC & ASL



# NSF OCE General Data Policy

- PIs are required to submit, at no more than incremental cost and within a reasonable time frame (but ***no later than two (2) years after the data are collected***), the primary data, samples, physical collections and other supporting materials created or gathered in the course of work under NSF/OCE grants to the appropriate Data Center (See appendices below or consult with the cognizant NSF Program Officer).
- Where no data or sample repository exists for collected data or samples, metadata must be prepared and made publicly available over the Internet and the PI is required to employ alternative strategies for complying with the general philosophy of sharing research products and data as described above. Where appropriate, samples should be curated in a manner that preserves the quality and integrity of the samples. When in doubt about what to do, the PI should consult with the NSF Program Officer handling the award.
- C. All standard underway data collected at sea aboard NSF-supported oceanographic research vessels will be submitted to the appropriate long-term archive through the R2R (Rolling Deck to Repository) program. For these data sets, this relieves the PI and the ship operator of post-cruise data management responsibility for the underway datasets (See Section VI-B for more specific information). For other at-sea, special ops or research-specific datasets collected on a cruise (such as water samples, ROV sampling, dredge hauls, etc.) the PI is responsible for collecting and making public the metadata associated with sample collection and the data or results from the research.
- D. PIs and their institutions, and ship-operating institutions are responsible for meeting all legal requirements for submission of data and research results that are imposed by foreign governments as a condition of that government's granting research clearances. Each PI and institution must determine their legal obligations in this respect, with the assistance of the Department of State and NSF, as necessary.

# NSF OCE Proposal Requirements

- For each proposal submitted to NSF, the NSF Grant Proposal Guide requires that proposals include a supplementary document of no more than two (2) pages that is labeled “Data Management Plan”.
- For proposals submitted to OCE core programs (i.e., unsolicited proposals), this supplementary document should describe how the proposal will conform to the OCE policy on the dissemination and sharing of samples and research results. If the proposal is associated with a specific solicitation it should include a discussion of any additional solicitation-specific data management or reporting criteria. Examples of information that may be appropriate to include in a Data Management Plan may include:
  - the types of data, samples, physical collections, software, derived models, curriculum materials, and other materials to be produced in the course of the project;
  - the standards to be used for data and metadata formatting and content (where existing standards are absent or deemed inadequate, these formats and contents should be documented along with any proposed solutions or remedies, where needed);
  - mechanisms for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
  - policies and provisions for re-use, re-distribution, and the production of derivatives; and plans for archiving data, samples, and other research products, and for preservation of access to them.