## ONE APPROACH TO ENSURING LONG-TERM ACCESS TO OCEAN RESEARCH DATA

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## DATA TO ARCHIVE

## Once upon a time ...

pumping systems





## DATA TO DAC TO ARCHIVE



Biological & Chemical Oceanography Data Management Office

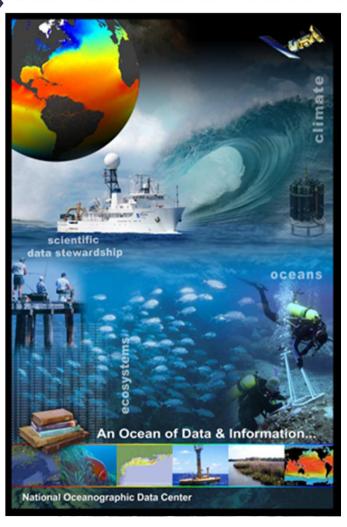


**Sediment traps** 





NATIONAL OCEANOGRAPHIC DATA CENTER (NODC)



#### U.S. NSF-FUNDED RESEARCH DATA

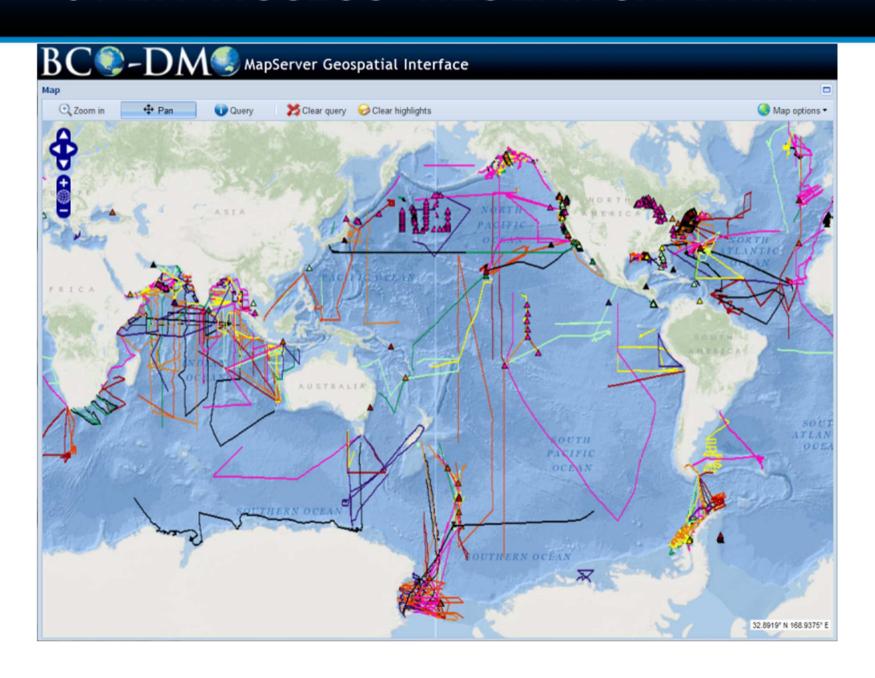


- funded by US NSF to provide data management support at no cost to researchers funded by the same program managers who fund BCO-DMO
- manage data from current projects, and legacy data from large coordinated research programs (e.g. US GLOBEC and US JGOFS)





## OPEN ACCESS RESEARCH DATA



### DATA LIFE CYCLE

Good data management practices account for all aspects of the data cycle, featuring a stewardship philosophy in all phases from "proposal to preservation".



### **PARTNERSHIPS**

IODE Associate Data Unit (ADU) iode.org



Join IODE as an "Associate Data Unit" and be part of a Global Ocean Data Network

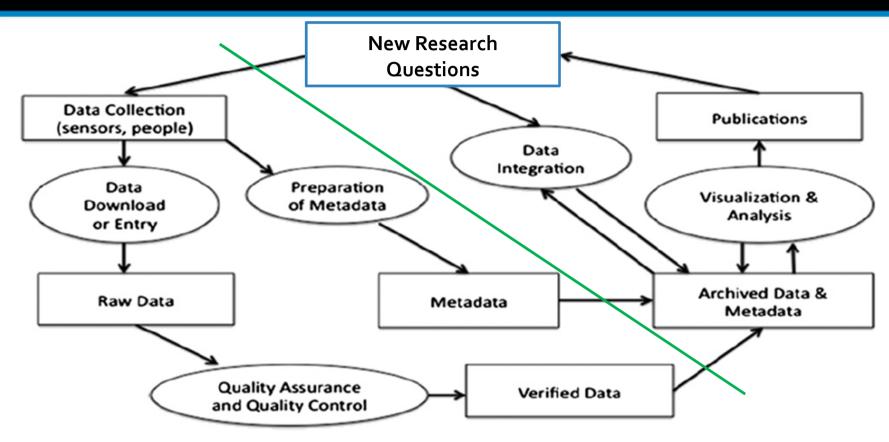
Research Data Alliance rd-alliance.org



RDA ~ Marine Data Harmonization Interest Group

IMDIS bags included information for both opportunities.

#### THE RESEARCH DATA RE-CYCLE



For data that are properly curated, archived and preserved, a second 'life cycle' is possible, one that generates additional publications and new research questions.

William K. Michener et al. (2011) "Long term ecological research and information management", Ecological Informatics, Volume 6, Issue 1, 2011 pgs. 13 – 24, http://dx.doi.org/10.1016/j.ecoinf.2010.11.005

#### DATA DISCOVERY & ACCESS

### Activities to promote data USE & REUSE:

- Use of standards (e.g. ISO, OGC)
- Controlled vocabulary terms
- Globally unique, persistent identifiers to unambiguously define a thing
- Agreeing on essential metadata (at least within a community-of-practice)

DISCOVERY & ACCESS

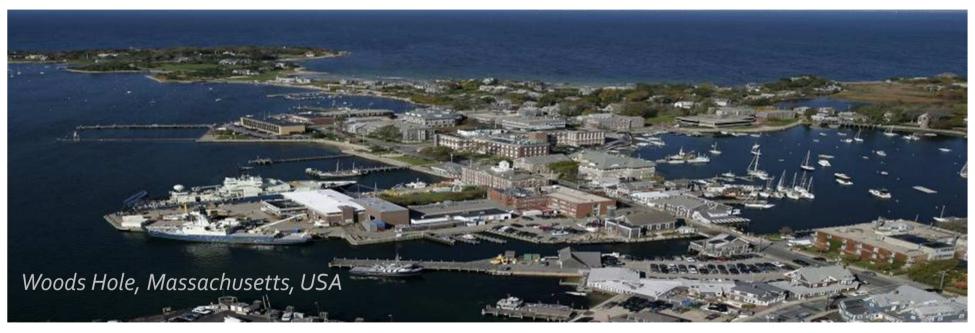
DATA
USE & REUSE

Abstracts -- Posters: 37, 57, 138, 168, 170, 176

Talks: 32, 128, 139, 147, 171

## THANK YOU

# Comments ... Questions?



Adam



Cyndy



Danie



Shannon





BCO-DMO people here this week

bco-dmo.org