

Regional DACs ↔ NODC netCDF templates and other data archiving, discovery, and access topics

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Purpose of Session

To facilitate the archiving of environmental data assembled by Regional Coastal Observing Systems and to solicit feedback

- Introduce NODC's SMEs and Q&A Topics
- Q&A about NODC NetCDF Templates
- Q&A about other data archiving topics (SIFs, etc.)
- Q&A about other archival data discovery/access topics

IOOS Summit 2012 White Paper

A VISION OF THE DATA CYCLE WITHIN THE IOOS OBSERVING SUBSYSTEM

by

Steven Rutz, Rob Ragsdale, Ed Kearns, Vembu Subramanian,
Kyle Wilcox, Richard Crout, Kern Witcher, Thomas Ryan,
Mathew Biddle, Krisa Arzayus, Charles Alexander

<http://www.iooc.us/summit/white-paper-guidelines/community-white-paper-submissions/>

A word cloud centered around the word 'data'. The word 'data' is the largest and most prominent, written in a dark red, bold, sans-serif font. Surrounding it are various related terms in different colors and sizes. The words include: 'iios' (purple), 'information' (green), 'netcdf' (yellow), 'observing' (dark green), 'subsystem' (dark green), 'national' (orange), 'regional' (dark green), 'nodc' (dark green), 'ocean' (red), 'ndbc' (yellow), 'providers' (red), 'products' (purple), 'system' (dark green), 'services' (orange), 'archive' (purple), 'access' (yellow), 'archives' (red), 'environmental' (purple), 'dac' (dark green), 'collectors' (dark green), 'file' (purple), 'dacs' (purple), 'files' (yellow), 'metadata' (dark green), and 'system' (dark green).

NODC SMEs

Ken Casey – NODC Technical Director

Chris Paver – Oceanographer

Tom Ryan – Oceanographer

Matt Biddle – Physical Scientist

John Relph – NODC Tech Development Team Leader

Yuanjie Li – Science Data Systems Analyst

NODC NetCDF templates

- Serve as starting point for Data Producers
- Based on “feature types”
- Conform to ACDD and CF conventions
- Includes NODC recommendations

2 RDAC Archiving Pilot Projects

SECOORA RCOOS (Vembu Subramanian) and
MARACOOS (Kyle Wilcox)

Status: Filling in Submission Information Form (SIF)

POCs

ID Data Types to Archive

Data Transport Mechanisms

File Naming Conventions and File Formats

File Integrity Checking

Feedback Mechanisms (e.g., email notification), etc.

Discovery and Access

- **New ... static URLs!**
 - E.g., <http://accession.nodc.noaa.gov/90313/data/o-data>
- Ocean Archive System
 - <http://www.nodc.noaa.gov/Archive/Search>
- Geoportal Server
 - <http://data.nodc.noaa.gov/geoportal>
- HTTP and FTP
 - <ftp://data.nodc.noaa.gov>
 - <http://data.nodc.noaa.gov>
- OPeNDAP's Data Access Protocol via Hyrax
 - <http://data.nodc.noaa.gov/.opendap>
- OGC's WMS and WCS via THREDDS Data Server
 - <http://data.nodc.noaa.gov/thredds>
- Web Accessible Folder of metadata harvested by Google and Data.gov
 - http://data.nodc.noaa.gov/NESDIS_DataCenters/metadata/index.html
- Live Access Server
 - <http://data.nodc.noaa.gov/las>



Search

Search metadata content, e.g. title:SST; use + to require keywords, e.g. +water +temperature;

use "" to search for an exact phrase, e.g. "water temperature"

(Search tips!)

Additional Options

WHEN

Dates overlap range Dates within range

From: (yyyyymmdd)

To: (yyyyymmdd)

WHERE

Zoom the map to desired area and choose "intersecting" or "fully within". You can zoom the map by shift-click-dragging a bounding box.

Anywhere Intersecting Fully within



Results 1-2 of 2 record(s)

Expand results [Zoom To Results](#) [Zoom To Searched Area](#)

Meteorological and oceanographic data collected from the National Data Buoy Center Coastal-Marine Automated Network (C-MAN) and moored (weather) buoys during May 2012 (NODC Accession 0090313)

The National Data Buoy Center (NDBC) established the Coastal-Marine Automated Network (C-MAN) for the National Weather Service in the early 1980's.



NDBC has installed approximately 50 C-MAN stations on lighthouses, at capes and beaches, on near shore isl...

[Website](#) [Details](#) [Metadata](#) [Download](#) [TDS](#)
[OPeNDAP](#) [FTP](#) [Zoom To](#)

Meteorological and oceanographic data collected from the National Data Buoy Center Coastal-Marine Automated Network (C-MAN) and moored (weather) buoys during June 2012 (NODC Accession 0092557)

The National Data Buoy Center (NDBC) established the Coastal-Marine Automated Network (C-MAN) for the National Weather Service in the early 1980's.



NDBC has installed approximately 50 C-MAN stations on lighthouses, at capes and beaches, on near shore isl...

[Website](#) [Details](#) [Metadata](#) [Download](#) [TDS](#)
[OPeNDAP](#) [FTP](#) [Zoom To](#)

See results through REST

API: [GEORSS](#) [ATOM](#) [HTML](#) [FRAGMENT](#) [KML](#) [JSON](#)

Q&A: NODC NetCDF Templates

<http://www.nodc.noaa.gov/data/formats/netcdf/>

Q&A: Other Data Archiving Topics

(SIF, data types, data transfer to NODC, etc.)

Submission Information Form

http://www.nodc.noaa.gov/General/NODC-Submit/NODC_SubmissionInfoForm_v1.3.pdf

Template for Automated Archiving (NODC Intranet)

<https://intra.nodc.noaa.gov/twiki/bin/view/NODC/AutomationSOPTemplate>

<https://intra.nodc.noaa.gov/twiki/bin/view/NODC/BodegaMarineLabSOPArchiveAutomation>

Q&A: Other Data Discovery/Access Topics

Ocean Archive System

<http://www.nodc.noaa.gov/Archive/Search>

Geoportal

<http://data.nodc.noaa.gov/geoportal>



Next Steps?