

# OAP Science Data Information System (SDIS) Forms and Instructions

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OMB 0648-0024

## Overview

The NOAA Ocean Acidification Program (OAP) Science Data Information System (SDIS) provides a web-based tool to upload scientific data for archival at NCEI. It includes tools to enter and edit metadata, add supplemental documents, and the option to check the data for common data errors.

## Request Account

In order to use the SDIS, users must have a login account. To request an account, there is a simple form with a minimum amount of required information, including name, email address, and the user's organization.

**Please enter the following information  
to request an OAP Dashboard user account:**

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First Name: \*

Middle:

Last Name: \*

Email: \*

Confirm Email: \*

Telephone:  Ext:

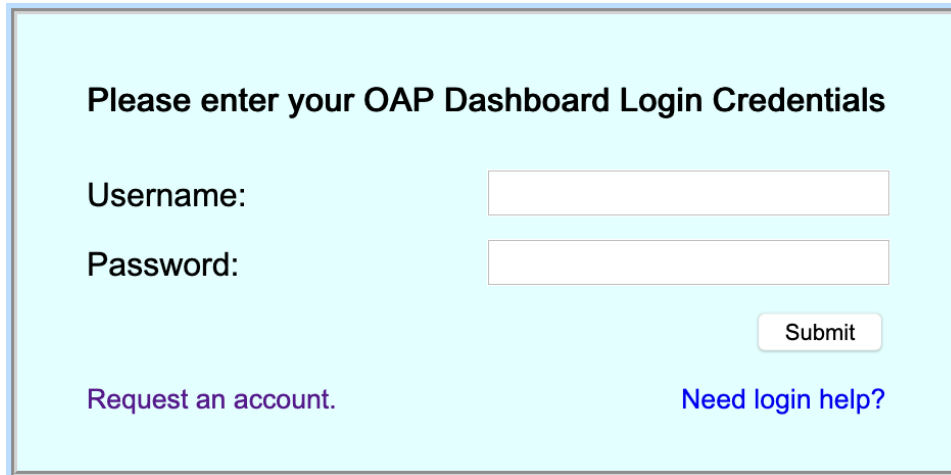
Organization: \*

\* Required Field.

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995 unless the information collection has a currently valid OMB Control Number. The approved OMB Control Number for this information collection is 0648-0024. Without this approval, we could not conduct this information collection. Public reporting for this information collection is estimated to be approximately 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. All responses to this information collection are voluntary. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the OAR, Eugene.Burger@noaa.gov. Geospatial metadata is requested in accordance with Executive Order 12906 and NOAA Administrative Order 212-5.

## Login

The login dialog with username and password also provides a link to reset a lost or forgotten password or username.



Please enter your OAP Dashboard Login Credentials

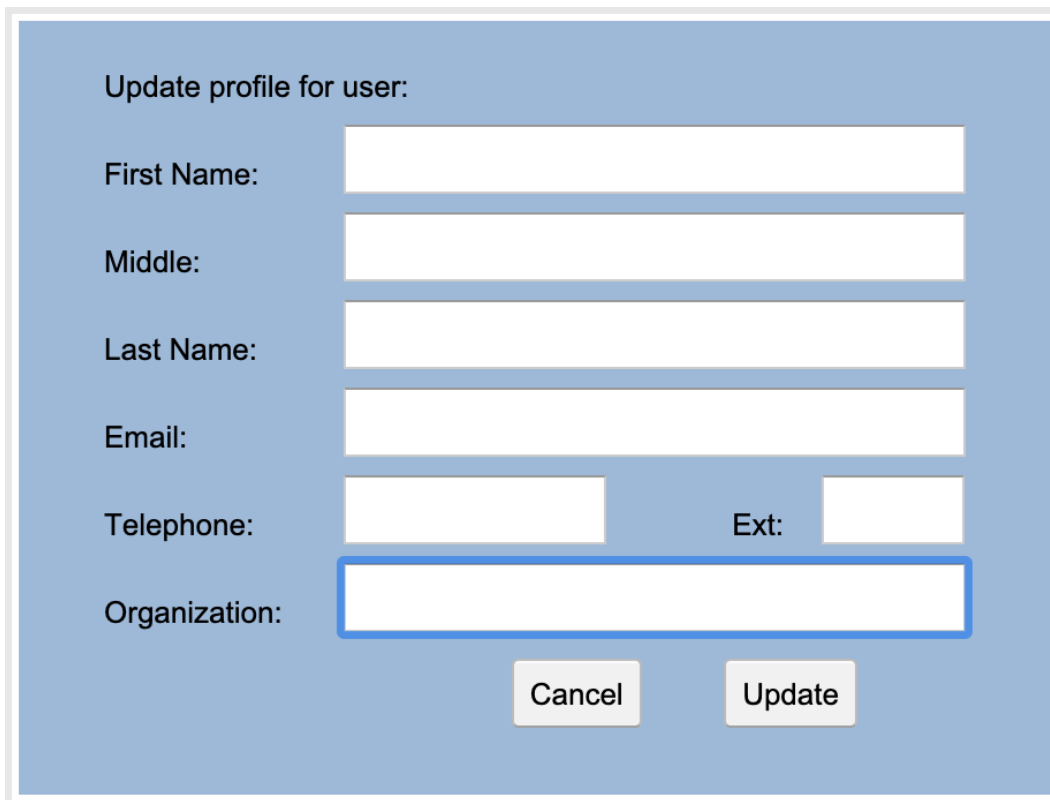
Username:

Password:

[Request an account.](#) [Need login help?](#)

## Edit Profile

Users can review and update their profile information through the Edit Profile dialog.



Update profile for user:

First Name:

Middle:

Last Name:

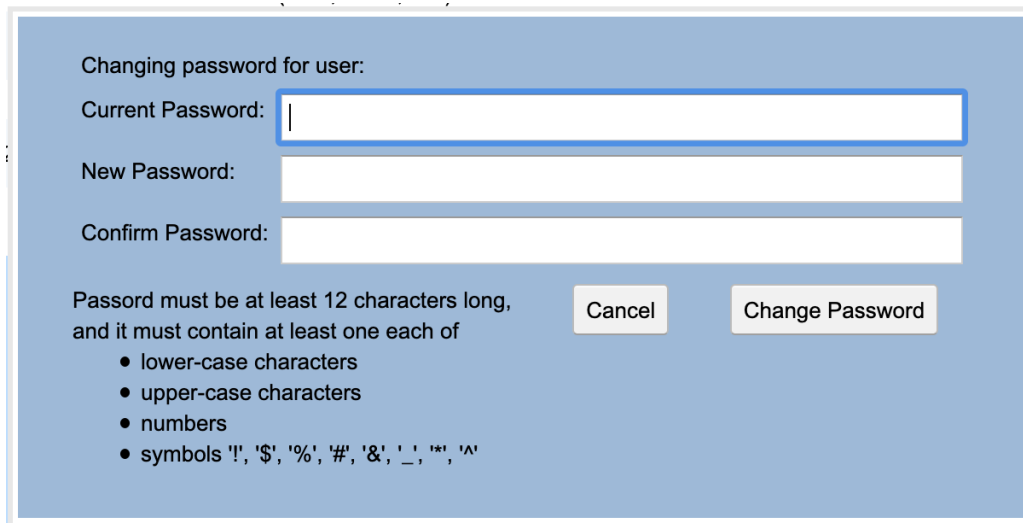
Email:

Telephone:  Ext:

Organization:

## Change Password

Users can change their password using the Change Password dialog. Passwords must conform to NOAA's password complexity requirements.



Changing password for user:

Current Password:

New Password:


Confirm Password:

Password must be at least 12 characters long, and it must contain at least one each of

- lower-case characters
- upper-case characters
- numbers
- symbols '!', '\$', '%', '#', '&', '\_', '\*', '^'

# Main Page: Dataset Listing

The application main page shows all the datasets that have been uploaded by the user. It will be empty the first time a user logs in to the application. The listing shows various information about the datasets, including the uploaded file name, and the current status of the various steps of the process. It also provides a toolbar on the left for the operations provided by the tool which include creating a new submission record, uploading a data file, entering dataset metadata, and submitting to the archive, as well as the optional steps of identifying the dataset variables, checking the data for common errors, adding supplemental documents, and previewing the data.


OAP Science Data Information System
Logged in as

My Datasets
Send Feedback | Preferences | Logout

	Record ID	Data File Name	Observation Type	Upload Date	Data Status	Metadata	Supplemental Documents
<input type="checkbox"/>	BE9A8FMNP	CB2015_09_trajectory.csv	Surface measurements (underway, discrete)	2021-04-12 09:52	No warnings	Metadata is incomplete	Add documents
<input checked="" type="checkbox"/>	BE56PH2WG	CHABA092013.tsv	Profile (CTD, bottle, etc.)	2021-02-24 11:15	6 warnings	Validated	SF_2020-09-09.jpg
<input type="checkbox"/>	BE56MSAU9	atlantic_profiles.csv	Profile (CTD, bottle, etc.)	2021-02-24 10:40	2 errors	Validated	Add documents
<input type="checkbox"/>	BE56MJRCY	Data_combined.csv	Profile (CTD, bottle, etc.)	2021-02-24 10:36	4 errors	Validated	Add documents
<input type="checkbox"/>	BE3X0P24S	CB2015_09.csv	Surface underway	2021-01-21 15:17	No warnings	Initial Metadata	Add documents
<input type="checkbox"/>	BEYU4HLR0	Crescent_64W_32N_Aug2016_Aug2017.csv	Time-series	2020-11-06 14:13	1 warnings	Validated	Add documents
<input type="checkbox"/>	BEYUVFVNW	CHABA102014.tsv	Profile (CTD continuous)	2020-11-06 11:14	2 errors	Validated	Add documents

New Submission

Identify Columns

Manage Data File

Manage Metadata

Supplemental Documents

Preview Dataset

Submit to Archive

Clone Submission

Delete Datasets

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## Upload Page

New submission records are created by selecting New Submission and uploading a data file on the Upload Data Files page. Users must specify the observation type, e.g. surface underway, profile, experiment, fish observation, etc.

**Upload Data Files**

Upload data files for data checks and archival.

Any file can be uploaded for archival. However, only ASCII-delimited (CSV, etc.) files and Excel spreadsheets can be checked for errors.

To be checked, a delimited file must include:

1. A complete header line with **column names for every column**,
2. an optional header line of data column units where appropriate,
3. followed by any number of lines of data values.

In addition, a file may contain:

1. Any number of comment lines that begin with the hash (#) character.
2. Any number of textual lines before the data column header row, provided they do not contain more than 5 columns.

Please Select Observation Type:  No file selected.

Advanced Options

Help about observation types.

Done

Time-series (moorings, etc.)  
Surface measurements (underway, discrete)  
Profile (CTD, bottle, etc.)  
Gliders, etc.  
Pump cast  
Model output  
Field experiment  
Laboratory experiment  
Fish examination  
Biological tows  
Marine mammal observation  
Other

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## Updates to a data file

If necessary, the user can upload a new data file to replace the previously uploaded file.

Upload a new version of the data file for dataset CHABA092013.tsv

No file selected.

Advanced Options

## Data Column Identification

In order to use some of the SDIS features, including metadata extraction and checking for data errors, users must identify the observation variables in their dataset by selecting from a drop-down list of standard variables. Once identified, the system will remember a user's data column mappings, and the user will only have to provide additional mappings in subsequent submissions if their variables change.

After the variables have been identified, the user can then opt to check the dataset for common data errors. The checks performed depend on the observation type and the included variables.

**OAP Science Data Information System**  
 Identify Data Columns: CHABA092013.tsv  
 Logged in as [User Name] | Send Feedback | Preferences | Logout

[1] record no: IGNORED (default missing values)  
 [2] cruise: CHABA092013 (default missing values)  
 [3] Date: 9/22/13 (default missing values)  
 [4] Time: time of day  
 [5] Matlab Datenum: IGNORED

Record No	Cruise	Date	Time	Matlab Datenum
1	2741	ChaBa092013		
2	2742	ChaBa092013		
3	2743	ChaBa092013		
4	2744	ChaBa092013		
5	2745	ChaBa092013		
6	2746	ChaBa092013		
7	2747	ChaBa092013		
8	2748	ChaBa092013		
9	2749	ChaBa092013		
10	2750	ChaBa092013		
11	2751	ChaBa092013		
12	2752	ChaBa092013		
13	2753	ChaBa092013		
14	2754	ChaBa092013		
15	2755	ChaBa092013		
16	2756	ChaBa092013		
17	2757	ChaBa092013		
18	2758	ChaBa092013	1:38:12	735500.0682
19	2759	ChaBa092013	4:41:41	735500.1956

Rows shown: 1-50 of 89

no errors; 6 warnings  
 Show errors/warnings

Done | Check Data | Save

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## Metadata Entry and Editing

The integrated Metadata Editor allows users to upload and edit metadata for their dataset. Metadata from a previous submission can be uploaded and edited, or a user can create a metadata Template for common information and start from that.

### Metadata: Data Submitter

This section provides common information about the person submitting the dataset. The minimum required information is necessary in the event the archive needs to contact the submitter with questions about the submission and to provide updates as to the status of the archiving process. Assuming the user is the Data Submitter, the required fields will be pre-populated from information in the users Profile.

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### Metadata: Investigators

Information about the Investigators involved is entered in the Investigators section. This form is identical to the Data Submitters for, with the exception that it allows any number of Investigators to be entered.

### Metadata: Citation

The Citation section provides fields for Research Title, Abstract, and List of Authors, and general information about the dataset and research project, including the purpose and use limitations of the data, related research projects, ship cruise identifiers if appropriate, scientific references, and any additional information. Only the Title, Abstract, and List of Authors are required.

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# Metadata: Time and Location Information

The Time and Location section includes the spatial and temporal bounds of the data, as well as names of the geographic areas where the data were collected. If the data has been checked by the SDIS, the spatial and temporal bounds will have been extracted from the data and filled in.

Done

Cancel

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OAP Science Data Information System

Manage Metadata: CHABA092013.tsv

Send Feedback Preferences Logout

Logged in as

Done

Cancel

✓ Data Submitter

Investigators

✓ Citation Information

✓ Time and Location Information

✓ Funding

✓ Platforms

✓ DIC

✓ TA

pH

pCO2A

pCO2D

✓ Variable

Metadata

Preview Download Save

Upload OADS Metadata File (XML, Excel, or CSV)

Choose file:

Upload Clear All

Enter the Information about the Time and Location.

(\*) Denotes a required field.

Start Date \* 2013-09-22

End Date \* 2013-09-25

Spatial Reference System WGS 84

Geographic Extents

North Latitude 48.467

West Longitude -125.016

East Longitude -122.455

South Latitude 47.813

Geographic Names Salish Sea, Puget Sound, Strait of Juan de Fuca, U.S. West Coast, C

Location of Organism Collection (Biological Study Only) Location of Organism Collection

SAVE TIME & LOCATION

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# Metadata: Funding

Information about the project funding including Grant Number, Funding Agency, and Project Title. is entered in the Funding section. If the project was funded by NOAA's Ocean Acidification Program (OAP), the funding details can be filled by selecting the grant number from a drop-down list.

The screenshot displays the 'Manage Metadata' interface for the file 'CHABA092013.tsv'. The main header identifies the system as 'OAP Science Data Information System' and shows the user is logged in. The left sidebar contains a list of metadata categories: Data Submitter, Investigators, Citation Information, Time and Location Information, Funding (selected), Platforms, DIC, TA, pH, pCO2A, pCO2D, and Variable. Below these are 'Metadata' actions (Preview, Download, Save) and an 'Upload OADS Metadata File (XML, Excel, or CSV)' section with a 'Choose file:' button and 'Upload'/'Clear All' options. The main content area is titled 'Enter the Funding Information. You may enter more than one funding source.' and contains three input fields: 'Grant Number' (with a dropdown arrow), 'Agency Name' (with an information icon), and 'Project Title' (with an information icon). A 'SAVE FUNDING' button is positioned below the Project Title field. The footer includes NOAA | OAR | PMEL | Privacy Policy | Disclaimer | Accessibility and the version number v\_20210413.1025.

# Metadata: Platforms

Details about the observation platform(s) used to collect the data including Name, Identifier, Country of Registration, Owner, and Type, are entered in the Platforms section. Multiple Platforms may be entered.

The screenshot shows the 'Manage Metadata' interface for the file CHABA092013.tsv. The 'Platforms' section is selected in the left-hand navigation menu. The main content area displays the following:

- Header:** Enter the Platform Information. You may enter more than one platform.
- Table:** A table with columns for Name, Platform Type, and Platform ID. One row is present: R/V Thomas G. Thompson, Global Class, T-AGOR-23, 3250. There are 'Edit' and 'Delete' buttons for this row.
- Form Fields:** Below the table are input fields for Platform Name, Platform ID, Country, Owner, and Platform Type, each with a help icon.
- Buttons:** A 'SAVE PLATFORM' button is located below the form fields.
- Footer:** NOAA | OAR | PMEL | Privacy Policy | Disclaimer | Accessibility and version v\_20210413.1025.

# Metadata: Variables

Details about the collection and handling of the observed variables are gathered in the Variables sections. There are five observed variables that are common in OAP observations – Dissolved Inorganic Carbon (DIC), Total Alkalinity (TA), pH, and CO<sub>2</sub> measured discretely or continuously – and those variables each have their own section, and then there is a section to add all the other variables that are included in the dataset. All the Variable sections are largely the same, although with slight differences in the specific detailed information gathered for each of the variables with their own section.


The DIC section is shown as exemplary.

The screenshot shows the 'OAP Science Data Information System' interface for managing metadata for 'Dissolved Inorganic Carbon (DIC)'. The page title is 'Manage Metadata: CHABA092013.tsv'. The user is logged in as 'v\_20210413.1025'. The interface is divided into several sections:

- Navigation:** A sidebar on the left contains buttons for 'Done', 'Cancel', and a list of variable categories: 'Data Submitter', 'Investigators', 'Citation Information', 'Time and Location Information', 'Funding', 'Platforms', 'DIC' (selected), 'TA', 'pH', 'pCO2A', 'pCO2D', and 'Variable'. Below this is a 'Metadata' section with 'Preview', 'Download', and 'Save' buttons, and an 'Upload OADS Metadata File (XML, Excel, or CSV)' section with a 'Choose file:' button and 'Upload' and 'Clear All' buttons.
- Form Fields:**
  - Variable Abbreviation \***: DIC\_umol\_kg
  - Full Variable Name**: Dissolved inorganic carbon
  - Observation Type**: Discrete measurements from samples collect
  - Sampling Instrument**: Niskin bottle
  - Analyzing Instrument**: Two systems consisting of a coulometer (UIC)
  - Units**: micromoles per kilogram of sea
  - Details about the Observation**: in-situ observation+
  - Measured or Calculated**: Measured or Calculated
  - Manipulation Method**: Not applicable
  - Calculation Method and Parameters**: Not applicable
  - Method Reference (citation)**: Dickson, A.G., C.L. Sabine, and J.R. Christia
  - Uncertainty**: ±0.1%
  - Data Quality Flag Description**: DIC\_QC, WOCE quality control
  - Researcher Name**: Dana Greeley
  - Researcher Institution**: Pacific Marine Environmental L.
- Textual Information:**
  - Detailed Sampling and Analyzing Information**: A text box containing a 'PLEASE NOTE' and a detailed description of the sampling procedure for DIC measurements, including the use of Niskin bottles, borosilicate glass flasks, and a HgCl<sub>2</sub> preservative.

# Supplemental Documents

Any additional documents that are to be submitted with the dataset are uploaded on the Supplemental Documents page. Typical supplemental documents include ship or experiment reports, observation images, and the like.

OAP Science Data Information SystemLogged in as [ ]

Supplemental Documents: CHABA092013.tsvSend FeedbackPreferencesLogout

Supplemental documents associated with the datasets:

- CHABA092013.tsv

	Filename	Upload date	Dataset
<input type="button" value="Delete"/>	SF_2020-09-09.jpg	2021-02-24 11:29 -0800	BE56PH2WG

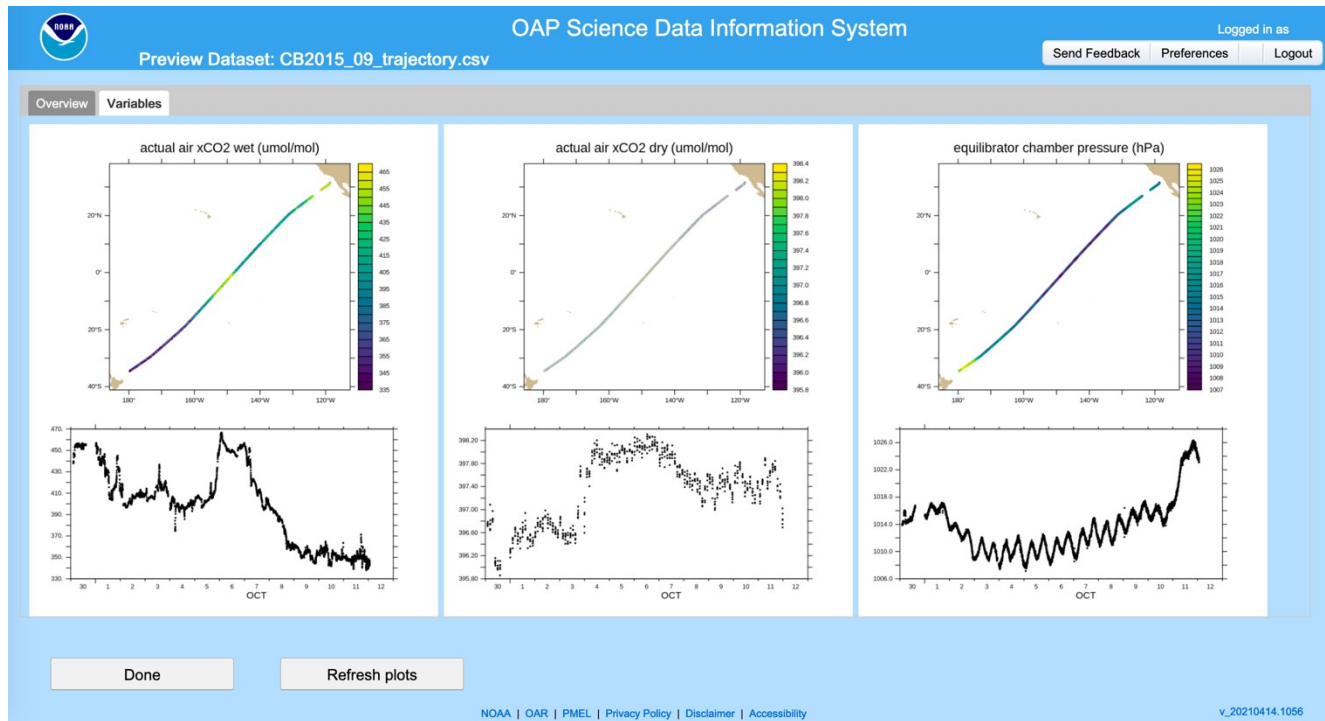
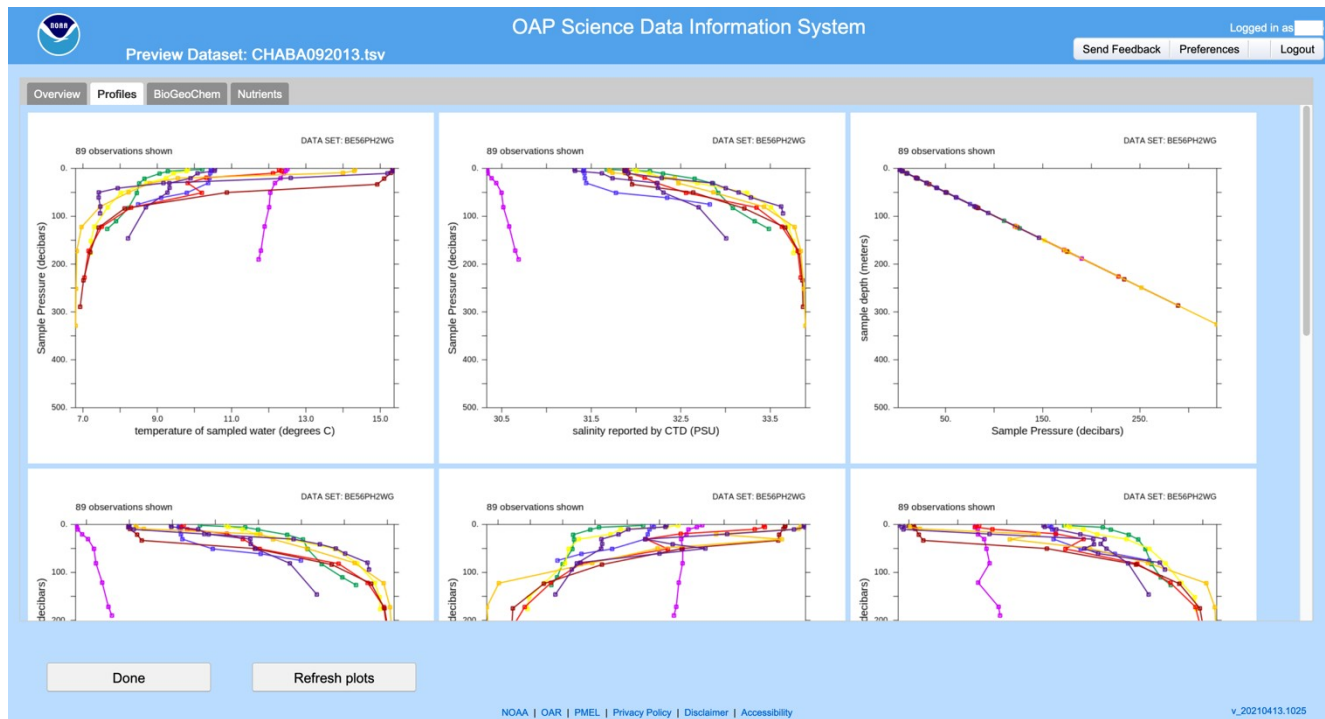
No files selected.

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# Data Preview Plots

If the user chooses, the SDIS can generate thumbnail preview plots of the data. Shown are example plots for profile and underway observations.



[Submit to Archive](#)

When ready, the data is submitted to the Archive on the Submit to Archive page. On this page there is the opportunity to add an optional message for the archival staff, as well as request that a DOI be provided for the submitted dataset. If this is an update of or addendum to a prior submission, the user can select those options and provide the accession number of the prior submission.

The screenshot shows the 'OAP Science Data Information System' submission interface. At the top, the NOAA logo is on the left, and the system name is centered. Below the system name, the current submission is identified as 'Submit Datasets for Archiving: CB2015\_09\_trajectory.csv'. On the right, there are links for 'Send Feedback', 'Preferences', and 'Logout', along with a 'Logged in as' indicator.

The main content area is divided into several sections:

- Files to be archived:** A list showing 'Data File : CB2015\_09\_trajectory.csv' and 'Metadata File : BE9A8FMNP\_metadata.xml'.
- Optional Submission Comment:** A text area with instructions: 'This optional comment will not be archived. Do not use this comment to include metadata or other important dataset information. Its use is solely to communicate special information or archiving considerations to the archive staff.'
- Submission Status:** A box on the right indicates 'Submission status for BE9A8FMNP' and 'Package not yet submitted.'
- Submission Options:** Radio buttons for 'New Submission' (selected), 'Update A Prior Submission', and 'Append Prior Submission'. Below this is an 'Accession #' field with a search link and a note: 'NOTE: You can search by last name in the "Additional Terms" field.'
- Agreements:** Checkboxes for 'Request NCEI generate DOI for submitted dataset.' and 'I agree to the Publication Policy Agreement.'
- Buttons:** 'Cancel' and 'Submit' buttons at the bottom.

At the bottom of the page, there are links for 'NOAA | OAR | PMEL | Privacy Policy | Disclaimer | Accessibility' and a version number 'v\_20210414.1754'.

The user must also agree to the Publication Policy Agreement before submitting.

The screenshot displays the text of the Publication Policy Agreement. The text reads: 'By submitting data for inclusion in the NCEI archives, you warrant that these data may be copied and distributed by NCEI for any purposes. NCEI may make these data available via electronic or other means without restrictions. You understand that NCEI will not compensate you in any way or pay you for use of these data. You further agree to indemnify NCEI in the event that it suffers liability or damages as a result of its use of these data. To the extent that any part of this submission is subject to the intellectual property rights of a third party, you warrant that you have obtained permission from that third party to submit that party's property to NCEI for the purposes specified in this agreement.'

At the bottom left of the text area, there is a 'Dismiss' button.

After submission, the status of the archival process will be updated in the status section.