

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

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:**

---

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.

### **Privacy Act Statement**

**Authority:** The collection of this information is authorized under 5 U.S.C. § 301, Departmental regulations which authorizes the operations of an executive agency, including the creation, custodianship, maintenance and distribution of records, and 15 U.S.C. 1512, Powers and duties of Department.

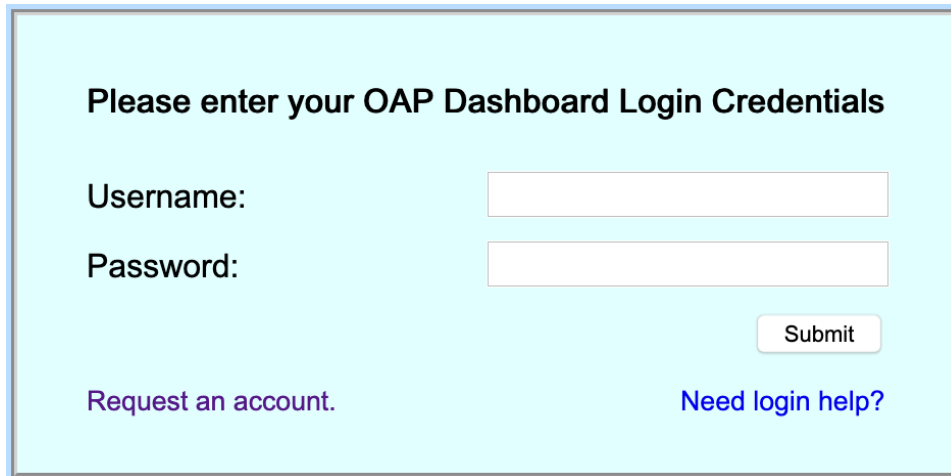
**Purpose:** NOAA collects limited information, such as name, address, phone number, or email address for a variety of purposes. This information will be used to respond to user inquiries or provide services requested by the user.

**Routine Uses:** Disclosure of this information is permitted under the Privacy Act of 1974 (5 U.S.C. Section 552a) to be shared among Department staff for work-related purposes. Disclosure of this information is also subject to all of the published routine uses as identified in the Privacy Act System of Records Notice [COMMERCE/NOAA-11](#), Contact Information for Members of the Public Requesting or Providing Information Related to NOAA's Mission.

**Disclosure:** Furnishing this information is voluntary. By providing this information, you are consenting to the use of that information only for the purpose for which it is submitted.

## 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

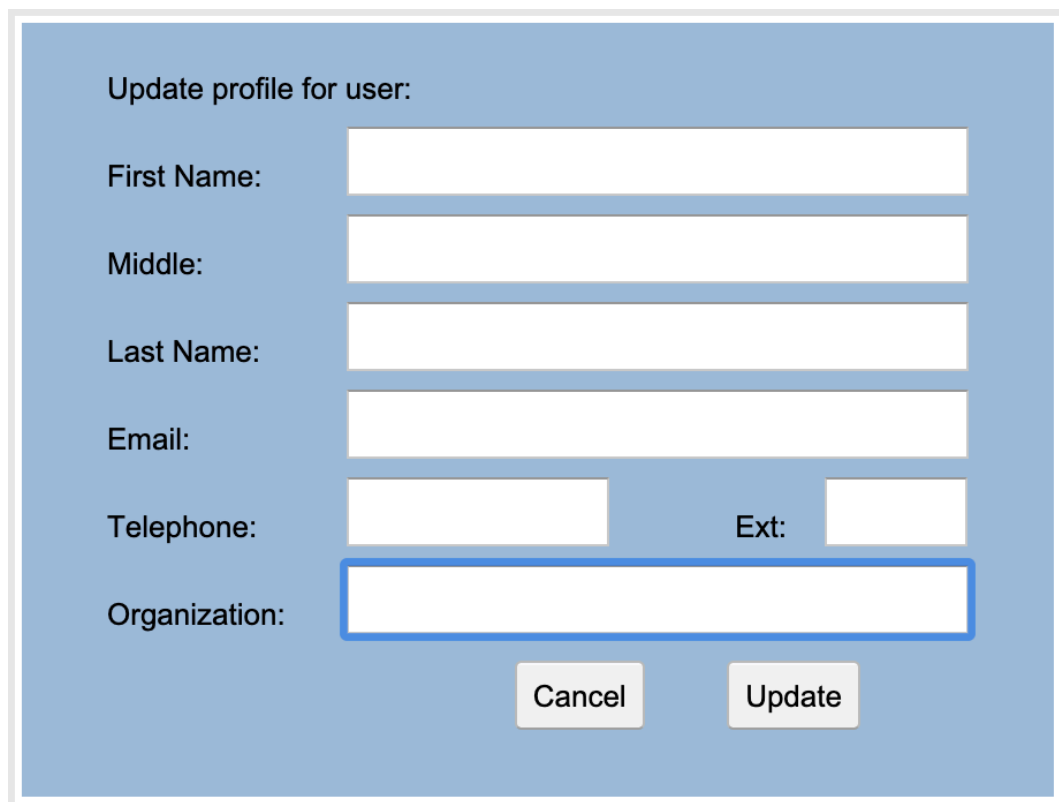
Username:

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:

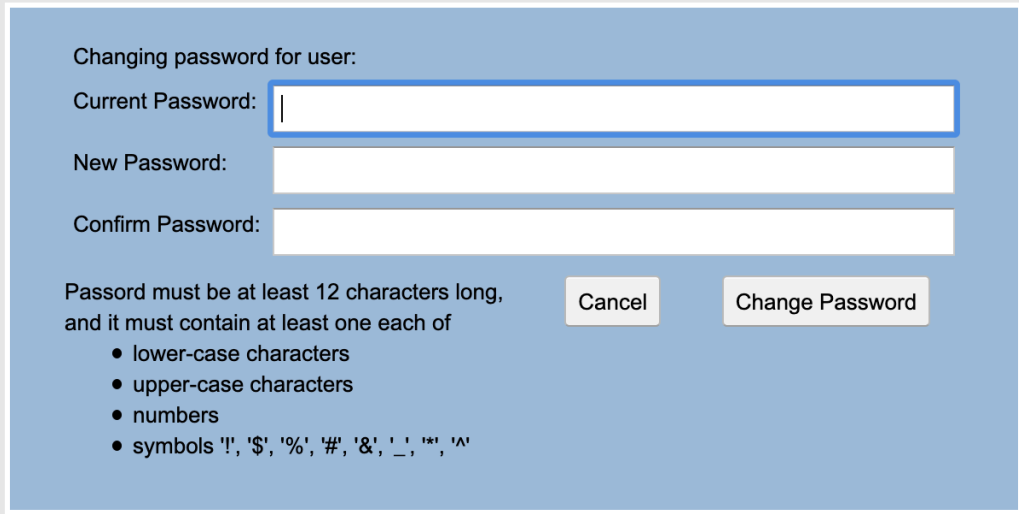
Email:

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

[Send Feedback](#)
[Preferences](#)
[Logout](#)

My Datasets

	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	<a href="#">Add documents</a>
<input checked="" type="checkbox"/>	BE56PH2WG	CHABA092013.tsv	Profile (CTD, bottle, etc.)	2021-02-24 11:15	6 warnings	Validated	<a href="#">SF_2020-09-09.jpg</a>
<input type="checkbox"/>	BE56MSAU9	atlantic_profiles.csv	Profile (CTD, bottle, etc.)	2021-02-24 10:40	2 errors	Validated	<a href="#">Add documents</a>
<input type="checkbox"/>	BE56MJRCY	Data_combined.csv	Profile (CTD, bottle, etc.)	2021-02-24 10:36	4 errors	Validated	<a href="#">Add documents</a>
<input type="checkbox"/>	BE3X0P24S	CB2015_09.csv	Surface underway	2021-01-21 15:17	No warnings	Initial Metadata	<a href="#">Add documents</a>
<input type="checkbox"/>	BEYU4HLR0	Crescent_64W_32N_Aug2016_Aug2017.csv	Time-series	2020-11-06 14:13	1 warnings	Validated	<a href="#">Add documents</a>
<input type="checkbox"/>	BEYUVFVNW	CHABA102014.tsv	Profile (CTD continuous)	2020-11-06 11:14	2 errors	Validated	<a href="#">Add documents</a>

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** OAP Science Data Information System Logged in as

Send Feedback Preferences Logout

**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: [Help about observation types.](#)

Browse... No file selected. Upload Done

Advanced Options

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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**

Browse... No file selected.

Upload Preview Cancel

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

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[1] record no [2] cruise [3] Date [4] Time [5] Matlab Datenum

IGNORED (default missing values) cruise/dataset name (default missing values) date [ mm-dd-yy ] (default missing values) time of day IGNORED

[1] record no	[2] cruise	[3] Date	[4] Time	[5] Matlab Datenum
1	2741	ChaBa092013	9/22/13	
2	2742	ChaBa092013	9/22/13	
3	2743	ChaBa092013	9/22/13	
4	2744	ChaBa092013	9/22/13	
5	2745	ChaBa092013	9/22/13	
6	2746	ChaBa092013	9/22/13	
7	2747	ChaBa092013	9/22/13	
8	2748	ChaBa092013	9/22/13	
9	2749	ChaBa092013	9/22/13	
10	2750	ChaBa092013	9/22/13	
11	2751	ChaBa092013	9/23/13	
12	2752	ChaBa092013	9/23/13	
13	2753	ChaBa092013	9/23/13	
14	2754	ChaBa092013	9/23/13	
15	2755	ChaBa092013	9/23/13	
16	2756	ChaBa092013	9/23/13	
17	2757	ChaBa092013	9/23/13	
18	2758	ChaBa092013	9/23/13	
19	2759	ChaBa092013	9/23/13	

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.

The screenshot displays the 'Manage Metadata' interface for the dataset 'CHABA092013.tsv'. The top navigation bar includes the NOAA logo, the system name 'OAP Science Data Information System', and user status 'Logged in as'. A sidebar on the left contains a 'Done' button and a list of metadata sections: 'Data Submitter' (selected), 'Investigators', 'Citation Information', 'Time and Location Information', 'Funding', 'Platforms', 'DIC', 'TA', 'pH', 'pCO2A', 'pCO2D', and 'Variable'. The main form area is titled 'Enter the Information for this Data Submitter.' and includes a note: '(\*) Denotes a required field.' The form fields are: 'First Name \*', 'M.I.' (with 'P' entered), 'Last Name \*', 'Institution \*', 'Address Line 1' (with 'Address First Line' entered), 'Address Line 2' (with '(Optional) Address Second Line' entered), 'City' (with 'City' entered), 'State/Province' (with 'State/Province' entered), 'Zip Code/Postal Code' (with 'Zip Code/Postal Code' entered), 'Country' (with 'Country' entered), 'Telephone Number' (with 'Telephone Number' entered), 'Extension' (with 'Extension' entered), 'Email Address \*' (with 'Email address' entered), and 'Researcher ID' (with 'Researcher ID' entered). A 'Pick and ID Type' dropdown is also present. At the bottom of the form is a 'SAVE PERSON' button. Below the form, there are options to 'Preview', 'Download', and 'Save' the metadata, and a section for 'Upload OADS Metadata File (XML, Excel, or CSV)' with a 'Choose file:' button and 'Upload' and 'Clear All' buttons. The footer contains links for 'NOAA | OAR | PMEL | Privacy Policy | Disclaimer | Accessibility' and the version number 'v\_20210413.1025'.

### 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.

NOAA

OAP Science Data Information System

Manage Metadata: CHABA092013.tsv

Logged in as [ ]

Send Feedback Preferences Logout

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 this Citation.

(\*) Denotes a required field.

**Title \***

Inorganic carbon, oxygen, nutrient and CTD measurements from the University of Washington's Puget Sound Regional Synthesis Model (PRISM) Program

**Abstract \***

This UW PRISM Puget Sound cruise took place from 02/04/2008 to 02/08/2008 aboard the RV Thomas G. Thompson. 42 time-series stations were occupied in the Salish Sea in Washington State marine waters. The cruise was designed to obtain a synoptic snapshot of key carbon, physical, and other biogeochemical parameters as they relate to ocean acidification (OA) in Washington's estuarine and coastal environments. At all sampling stations, CTD casts were conducted to measure temperature, conductivity, pressure, and oxygen concentrations using CTD and oxygen sensors. Discrete water samples were collected throughout the water column at all stations in Niskin bottles. Laboratory analyses were run to measure dissolved inorganic carbon (DIC), oxygen, and nutrient concentrations and total alkalinity. More information—including a map of stations occupied during this cruise (and other Salish cruises), full-resolution CTD downcast data for all stations sampled, chlorophyll and phaeopigment concentrations,

**List of Authors for Citation \***

List of authors for citation (LastName, FirstName, MI; LastName, FirstName, MI; ...)

**Use Limitation**

Use Limitations

**Purpose**

The major objectives of the cruise were:

- 1) To characterize ocean acidification (OA) conditions in the Salish Sea and adjoining coastal waters;
- 2) To conduct inter-calibration measurements near other OA observing assets, including moorings, in the study area, allowing inter-calibration of these autonomous assets with high-quality ship-based measurements.

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javascript:;



# 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.

The screenshot displays the 'Manage Metadata' interface for the file 'CHABA092013.tsv'. The top navigation bar includes the NOAA logo, the system name 'OAP Science Data Information System', and user options like 'Send Feedback', 'Preferences', and 'Logout'. The sidebar on the left lists various metadata categories, with 'Time and Location Information' currently selected. The main content area is titled 'Enter the Information about the Time and Location.' and contains several input fields: 'Start Date \*' (2013-09-22), 'End Date \*' (2013-09-25), and 'Spatial Reference System' (WGS 84). A 'Geographic Extents' section contains fields for 'North Latitude' (48.467), 'West Longitude' (-125.016), 'East Longitude' (-122.455), and 'South Latitude' (47.813). Below this, 'Geographic Names' is filled with 'Salish Sea, Puget Sound, Strait of Juan de Fuca, U.S. West Coast, C', and 'Location of Organism Collection (Biological Study Only)' is 'Location of Organism Collection'. A 'SAVE TIME & LOCATION' button is present. At the bottom, there are options to 'Preview', 'Download', or 'Save' the metadata, and a file upload section for 'Upload OADS Metadata File (XML, Excel, or CSV)' with 'Choose file:', 'Upload', and 'Clear All' buttons. The footer contains links for NOAA, OAR, PMEL, Privacy Policy, Disclaimer, and Accessibility, along with the version number v\_20210413.1025.

# 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 shows the 'Manage Metadata' interface for the file 'CHABA092013.tsv'. The main heading is 'Enter the Funding Information. You may enter more than one funding source.' Below this, there are three input fields: 'Grant Number' (with a dropdown arrow), 'Agency Name', and 'Project Title'. A 'SAVE FUNDING' button is positioned below the Project Title field. On the left sidebar, the 'Funding' category is highlighted in blue, while others like 'Data Submitter', 'Investigators', and 'Citation Information' are expanded with checkmarks. At the bottom of the sidebar, there are 'Metadata' options (Preview, Download, Save) and an 'Upload OADS Metadata File' section with a 'Choose file:' button and 'Upload'/'Clear All' buttons. The top navigation bar includes the NOAA logo, the system name 'OAP Science Data Information System', and user options like 'Send Feedback', 'Preferences', and 'Logout'. The footer contains links for '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.

Manage Metadata: CHABA092013.tsv

OAP Science Data Information System

Logged in as [User Name] | Send Feedback | Preferences | Logout

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: [File Selection]

Upload | Clear All

Enter the Platform Information. You may enter more than one platform.

Name	Platform Type	Platform ID	
<a href="#">Edit</a> R/V Thomas G. Thompson	Global Class, T-AGOR-23	3250	<a href="#">Delete</a>

Platform Name  Platform ID  Country  Owner

Platform Type

SAVE PLATFORM

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# 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 displays the 'Manage Metadata' interface for the file 'CHABA092013.tsv'. The main heading is 'Enter the Information for Dissolved Inorganic Carbon (DIC)'. A red asterisk indicates that fields marked with an asterisk are required. The form is organized into several sections:

- Variable Abbreviation:** Input field containing 'DIC\_umol\_kg'.
- Full Variable Name:** Input field containing 'Dissolved inorganic carbon'.
- Observation Type:** Dropdown menu set to 'Discrete measurements from samples collect'.
- Sampling Instrument:** Input field containing 'Niskin bottle'.
- Analyzing Instrument:** Input field containing 'Two systems consisting of a coulometer (UIC)'. A question mark icon is present.
- Units:** Input field containing 'micromoles per kilogram of sea'.
- Details about the Observation:** Dropdown menu set to 'in-situ observation'.
- Measured or Calculated:** Dropdown menu set to 'Measured or Calculated'.
- Manipulation Method:** Input field containing 'Not applicable'.
- Calculation Method and Parameters:** Input field containing 'Not applicable'.
- Method Reference (citation):** Input field containing 'Dickson, A.G., C.L. Sabine, and J.R. Christia'.
- Detailed Sampling and Analyzing Information:** A large text area containing a 'PLEASE NOTE' and a detailed paragraph about the sampling procedure for DIC measurements.
- Uncertainty:** Input field containing '±0.1%'.
- Data Quality Flag Description:** Input field containing 'DIC\_QC, WOCE quality control'.
- Researcher Name:** Input field containing 'Dana Greeley'.
- Researcher Institution:** Input field containing 'Pacific Marine Environmental L.'.

At the bottom of the form, there is a 'Field Replicate Information' section. The footer of the page includes 'NOAA | OAR | PMEL | Privacy Policy | Disclaimer | Accessibility' and the version number 'v\_20210413.1025'.

# 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 System Logged in as [ ]

Supplemental Documents: CHABA092013.tsv Send Feedback Preferences Logout

Supplemental documents associated with the datasets:

- CHABA092013.tsv

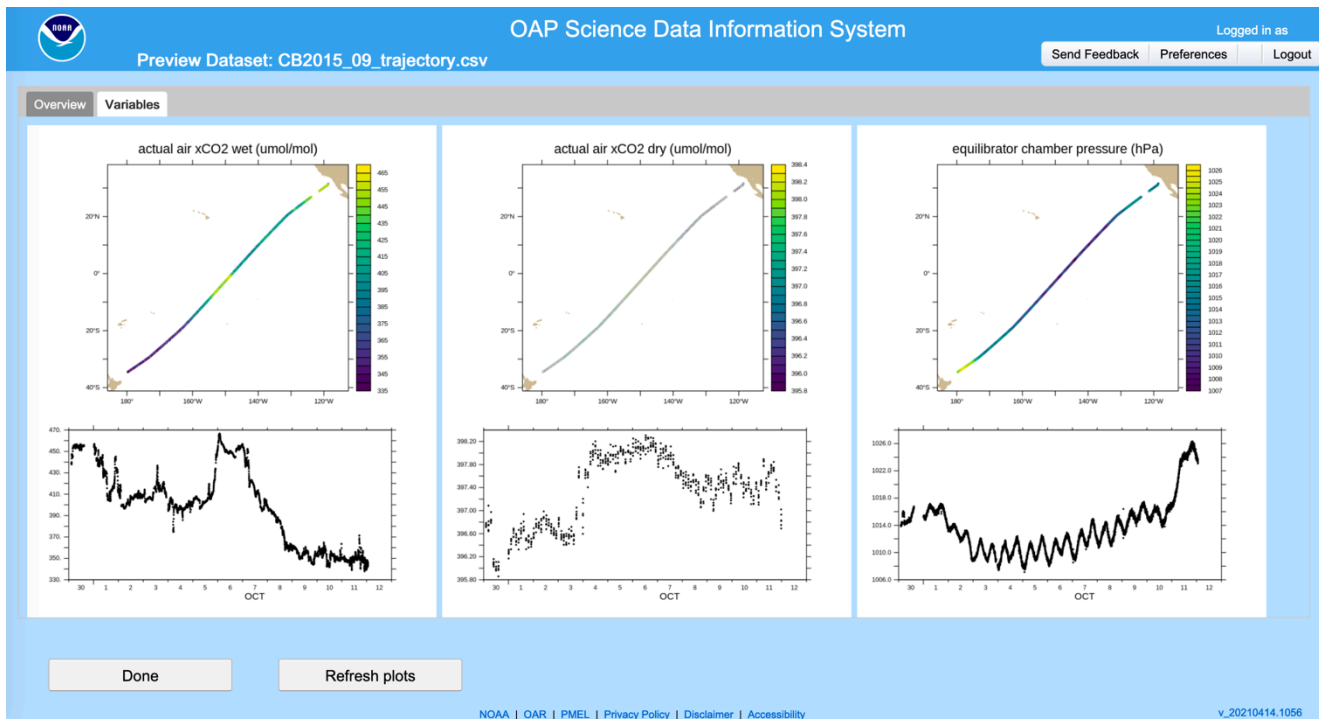
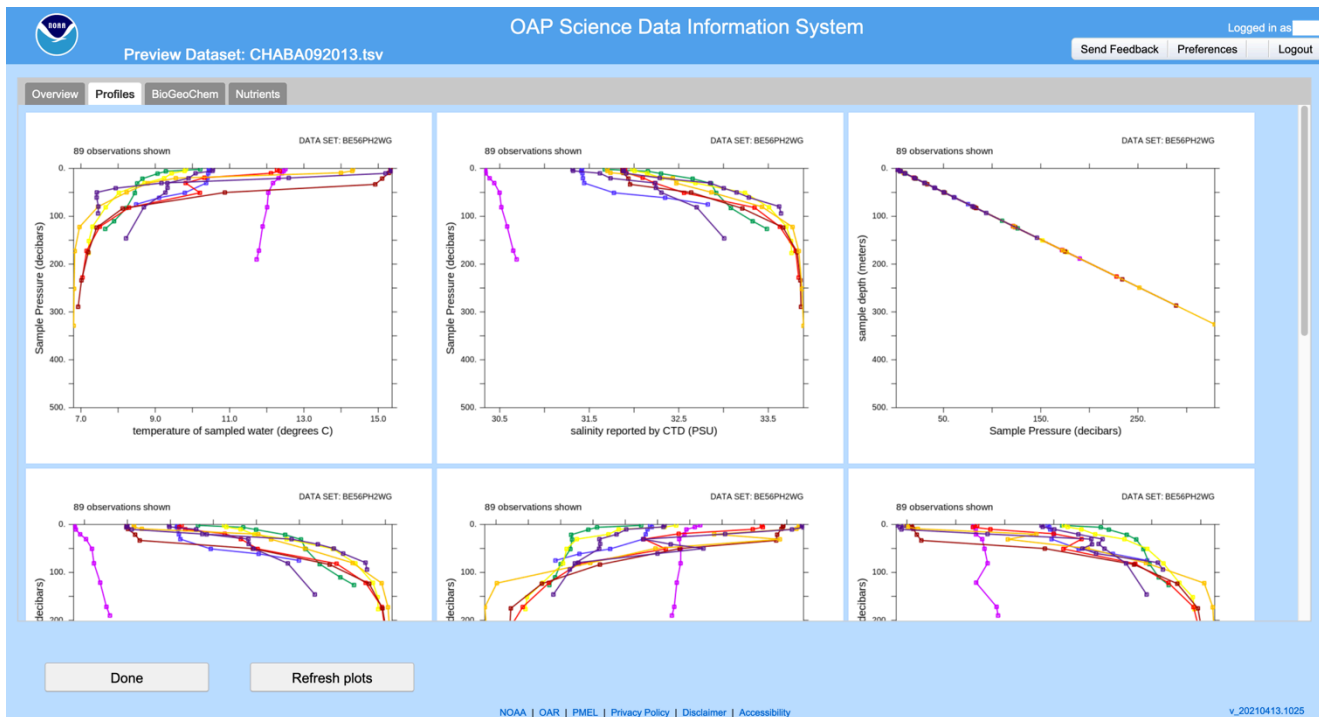
	Filename	Upload date	Dataset
<input type="button" value="Delete"/>	SF_2020-09-09.jpg	2021-02-24 11:29 -0800	BE56PH2WG

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' interface. At the top, it says 'Submit Datasets for Archiving: CB2015\_09\_trajectory.csv' and 'Logged in as'. There are links for 'Send Feedback', 'Preferences', and 'Logout'. The main content area lists files to be archived: 'Data File : CB2015\_09\_trajectory.csv' and 'Metadata File : BE9A8FMNP\_metadata.xml'. A box on the right shows 'Submission status for BE9A8FMNP' with the message 'Package not yet submitted.' Below this is an 'Optional Submission Comment' section with a text area and 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.' There are three radio button options: 'New Submission' (selected), 'Update A Prior Submission', and 'Append Prior Submission'. An 'Accession #' field is present with a search link 'Search OA Data Portal.' and a note: 'NOTE: You can search by last name in the "Additional Terms" field.' There are two checkboxes: 'Request NCEI generate DOI for submitted dataset.' and 'I agree to the Publication Policy Agreement.' At the bottom are 'Cancel' and 'Submit' buttons. The footer contains 'NOAA | OAR | PMEL | Privacy Policy | Disclaimer | Accessibility' and 'v\_20210414.1754'.

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

The screenshot shows a text box containing the following text: '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.' Below the text is a 'Dismiss' button.

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