

# AODN Data Submission Tool

An open source tool for capturing research data - simplifying the process of gathering information in a standard format and preparing it for upload to the AODN Catalogue.

[Sign In](#)

User Guide

## What is Metadata?

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*Metadata* is commonly known as 'data about data'. It is the set of information that describes a data set, and includes details such as the name, format, context, content, and structure of the data. Metadata may also provide additional information related to the timing and location of the study, data quality and collection methods, contributors and funding bodies, and other useful information describing a data set.

## How does the Data Submission Tool work?

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The AODN Data Submission Tool provides an intuitive user interface to collect metadata about research collections in a standardised format. With a simple one step log-in process, users can create metadata records and submit them with associated data file(s) for upload in either the [AODN Portal](#) or the [AODN Metadata Catalogue](#). All draft, submitted, and uploaded records can be managed by users on their personalised [dashboard page](#).

## Using this guide

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This User Guide is intended to provide a comprehensive overview for understanding and using the AODN Data Submission Tool. We recommend you refer to the guide as a set of practical instructions to help you work through the steps of completing your first metadata record. You can navigate to any part of the guide via the summary of contents on the next page of this document.

## Acknowledgement

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The AODN would like to acknowledge initial development of this tool by the Institute for Marine and Antarctic Studies (IMAS), and this subsequent work which was co-funded by Research Data Services (RDS).

## Questions & comments

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If you have any queries or require additional information to be included in your metadata, please email [info@aodn.org.au](mailto:info@aodn.org.au). This may include specific comments regarding the format required for citing the data, a request for a Digital Object Identifier (DOI), or any other information not captured by the Data Submission Tool.

This (meta)data collection tool is currently in its infancy, and we welcome all comments to assist with its improvement. Please direct all general comments and queries to [info@aodn.org.au](mailto:info@aodn.org.au).

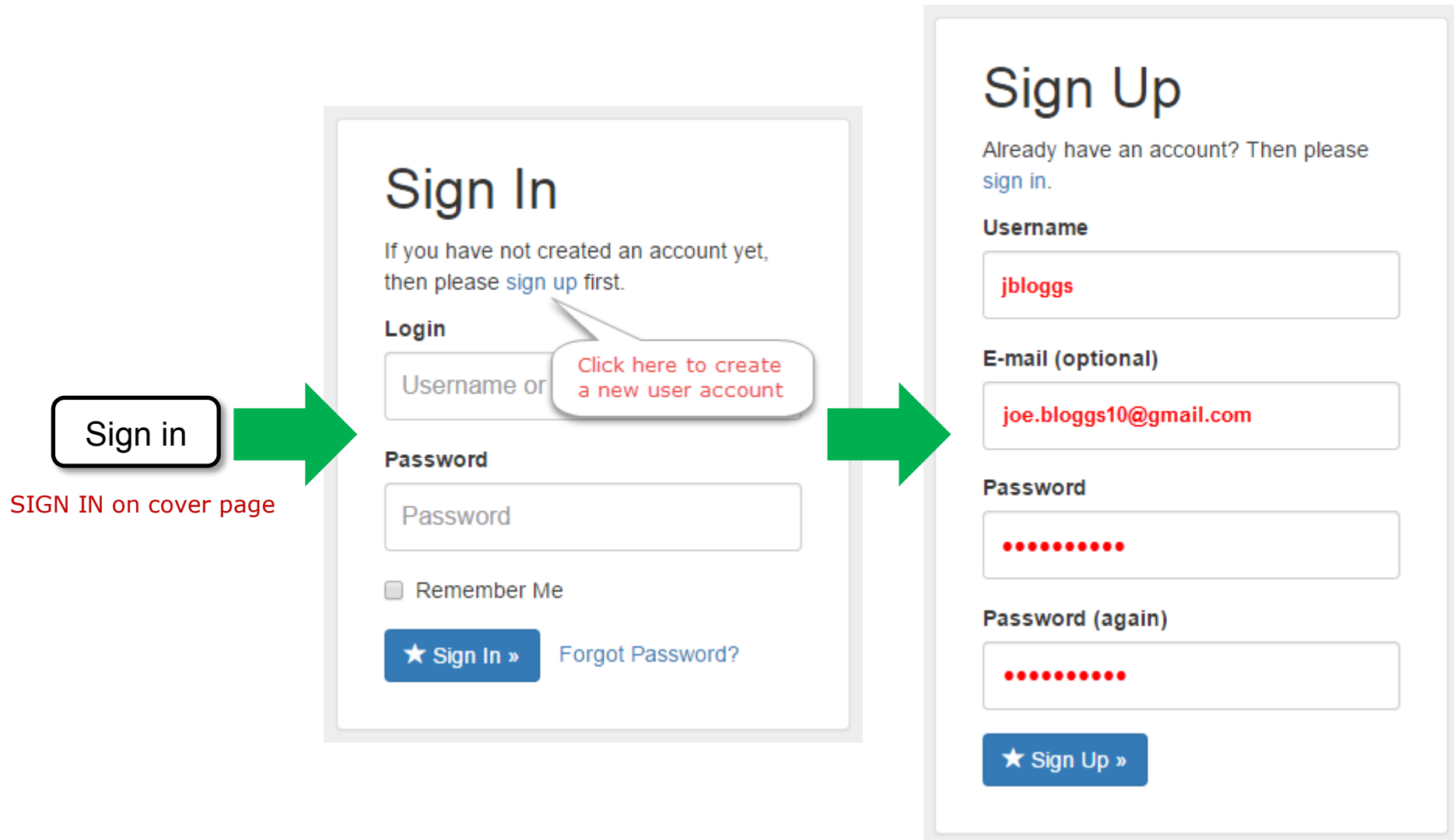
- **AODN Team**

## Contents

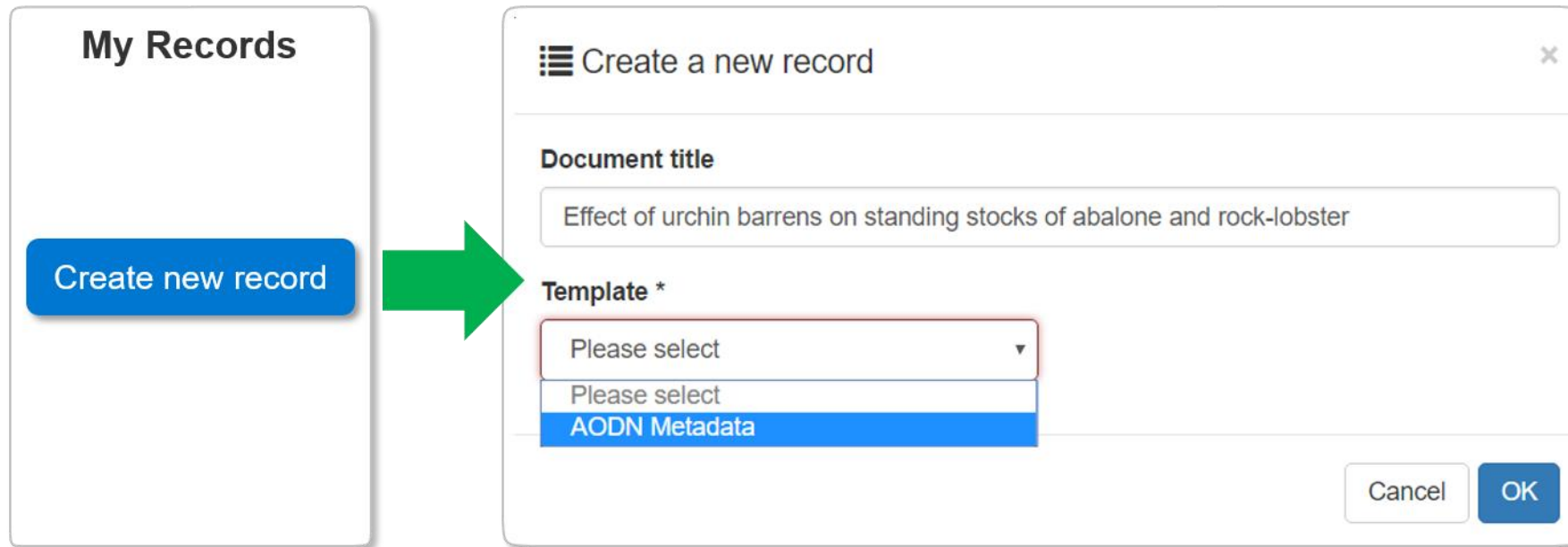
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# Create a user account / Sign in



## Create a new Metadata record



The image shows a user interface for creating a new metadata record. On the left, a box titled "My Records" contains a blue button labeled "Create new record". A green arrow points from this button to a dialog box titled "Create a new record". The dialog box has a close button (X) in the top right corner. It contains a text input field for "Document title" with the text "Effect of urchin barrens on standing stocks of abalone and rock-lobster". Below this is a "Template \*" dropdown menu with a red border, showing a list of options: "Please select", "Please select", and "AODN Metadata" (which is highlighted in blue). At the bottom right of the dialog are "Cancel" and "OK" buttons.

Select [AODN Metadata](#) as the document template. This is currently the only metadata template available, however new ones can be created as required for your group/organisation.

# Managing your records / Housekeeping

View a complete list of all your metadata records on your personal dashboard. The checkboxes to the right enable filtering by status of the record (Draft, Submitted, Uploaded or Archived). By default this page will display **Draft** and **Submitted** records. Note that if you accidentally delete a record, it is recoverable from the **Archived** section.

AODN Data Submission Tool

My Records Help natalla Sign out

**My Records** [+ Create new record](#)

Draft (7)  
 Submitted (4)  
 Uploaded  
 Archived

natalia / natalia demo	Draft	archive clone edit
Last edited a month ago by natalia		
natalia / Natalia test new org		archive clone edit
Last edited 2 months ago by natalia		
natalia / Natalia test space	Submitted	archive clone edit
Last edited 2 months ago by natalia		
natalia / Natalia test pdf with no spaces 1208	Draft	archive clone edit
Last edited 2 months ago by natalia		
natalia / Natalia test pdf upload 1208	Draft	archive clone edit
Last edited 2 months ago by natalia		
natalia / Natalia test organisation fixes 1208	Submitted	archive clone edit
Last edited 2 months ago by natalia		

View and manage your metadata records at any time by accessing your dashboard here

Records in progress are marked as **Draft**. Status will change to **Submitted** once a record is lodged, and **Uploaded** once the Data Manager has published your record

Archive, clone or edit a record here

Toggle the view of your records by submission status

# Finding your way around

The screenshot shows the AODN Data Submission Tool interface. At the top, the header includes 'AODN Data Submission Tool', 'My Records', 'Help', 'natalia', and 'Sign out'. Below the header, the user 'natalia' is editing a record titled 'Effect of urchin barrens on standing stocks of abalone and rock lobster' in 'Draft' status. The record was last edited 28 minutes ago. There are 'Archive' and 'Save' buttons. A progress bar shows 14% completion. The 'Data identification' tab is active, with sub-tabs for 'What', 'When', 'Where', 'How', and 'Who'. A yellow information bar lists mandatory fields: 'Status of data: This field is required' and 'Topic category: This field is required'. The '1. Data Identification' section contains a 'Title' field with the text 'Effect of urchin barrens on standing stocks of abalone and rock lobster', a description field, a 'Date of record creation' field with the date '25-10-2016', and a 'Topic category' dropdown menu. Annotations explain that asterisks indicate mandatory fields, the information bar shows fields needing attention, and the progress bar shows completion percentage.

AODN Data Submission Tool

My Records Help natalia Sign out

natalia / Effect of urchin barrens on standing stocks of abalone and rock lobster **Draft** Archive Save

Last edited 28 minutes ago

\* indicates tabs with mandatory fields currently left blank

Remember to save your record regularly! A warning window will appear if you try to navigate away from a record with unsaved changes.

Data identification \* What \* When \* Where \* How \* Who \*

14%

There are multiple fields on this page that require your attention:

- Status of data: This field is required
- Topic category: This field is required

Information bar shows mandatory fields still requiring attention on the current tab (click X to close any time)

Shows % completion of all fields. Status bar will turn green when all mandatory fields are filled. You should aim to complete as many fields as possible, but 100% is not necessarily required for record to be submitted.

## 1. Data Identification

**Title \***

Effect of urchin barrens on standing stocks of abalone and rock lobster

Clear and concise description of the content of the resource

**Date of record creation \***

25-10-2016

**Topic category \***

Please select

\* indicates mandatory fields requiring content fill



# TAB 1: Data Identification

Complete all fields using the prompts provided. Asterisks (\*) will clear from tab headings once all mandatory fields have been filled.

Data identification \*    What \*    When \*    Where \*    How \*    Who \*    About    Data sources    Lodge    17%

Maintenance and update frequency: This field is required ✕

## 1. Data Identification

**Title \***  
Effect of urchin barrens on standing stocks of abalone and rock lobster  
Clear and concise description of the content of the resource

**Date of record creation \***  
25-10-2016 📅

**Topic category \***  
oceans ▼

**Status of data \***  
ongoing ▼

**Maintenance and update frequency \***  
Please select ▼

Frequency of updates to the **data**.  
This will be disabled if data is marked as **complete** at the previous step.

## TAB 2: What

Provide a brief abstract of the data set and add some keywords to describe the data. Search for keywords in the inbuilt thesaurus (NASA GCMD Theme Science Keywords v8.0) by typing in the search box, or click the **Browse** button to expand the full alphabetical list of available keywords.

Data identification \* What When \* Where \* How \* Who \* About Data sources Lodge 21%

## 2. What

**Abstract \***

The effect of barrens formed by the long spined sea urchin, *Centrostephanus rodgersii*, on the standing stocks of southern rock lobsters (*Jasus edwardsii*) and black lip abalone (*Haliotis rubra*) was estimated by divers using underwater visual census methods to compare lobster and abalone abundance in barrens with that in adjacent kelp habitat. Abalone and rock-lobster populations were compared on *C. rodgersii* barrens and in adjacent algal-dominated habitat at the same depth and on the same substratum type at three sites in eastern Tasmania. At Elephant Rock and St Helens Island, the barrens are extensive and well established Type 1 barrens, while at Mistaken Cape the barrens in 8-14 m are incipient Type 4 barrens, comprising small barren patches in the algal bed.

Describe the content of the resource; e.g. what information was collected, how was it collected, brief statement about the purpose of the study

**Research theme keywords \***

Select up to 12 research theme keywords describing your data

BIOLOGICAL CLASSIFICATION > ANIMALS/INVERTEBRATES > ECHINODERMS  
SEA URCHINS

OCEANS > AQUATIC SCIENCES  
FISHERIES

macroal

Take note of the keyword hierarchy here. Some keywords may appear multiple times but with different contexts (e.g. TURBIDITY may apply to air quality or ocean chemistry)

Click (-) to remove a keyword

Browse

BIOLOGICAL CLASSIFICATION > PLANTS  
MACROALGAE (SEAWEEEDS)

BIOLOGICAL CLASSIFICATION > PLANTS > MACROALGAE (SEAWEEEDS)  
BROWN ALGAE

BIOLOGICAL CLASSIFICATION > PLANTS > MACROALGAE (SEAWEEEDS)  
GREEN ALGAE

BIOLOGICAL CLASSIFICATION > PLANTS > MACROALGAE (SEAWEEEDS)  
RED ALGAE

## TAB 2: What (continued)

List additional free text keywords if required (note: try searching for these keywords using the inbuilt thesaurus before typing your own). Add any relevant taxon keywords. Check the spelling carefully as taxon keywords will be used in search functions to discover your data.

Data identification \* **What** When \* Where \* How \* Who \* About Data sources Lodge 21%

### 2. What


**Additional theme keywords**  
Enter your own additional theme keywords as required

- ecological hysteresis -
- phase shift -
- barren -

Enter a theme keyword +

**Taxon keywords**  
Add any taxon names describing your data

- Centrostephanus rogersii -
- Haliotis rubra -
- Jasus edwardsii +



# TAB 3: When

Select a start and end date for the duration of data collection.

Data identification \*   What \*   **When \***   Where \*   How \*   Who \*   About   Data sources \*   Lodge

48%

### 3. When

**Start date \***

01-06-2005

**End date \***

05-03-2012

This field will be disabled if data is marked as *ongoing* on Tab 1 (Data identification).

**Sampling Frequency**

Please select ▼

- Please select
- Daily
- Weekly
- Monthly**
- Quarterly
- Annually
- Ongoing
- As required
- Irregular
- None planned

## TAB 4: Where

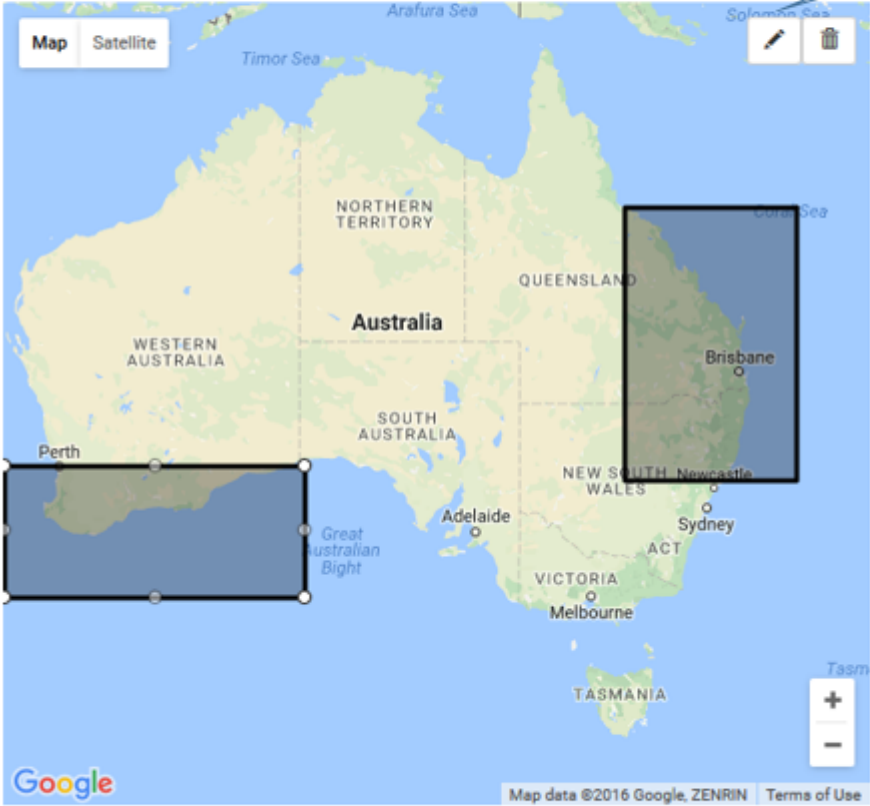
Describe the spatial coverage of the data. Note that for laboratory experiments this can include the site(s) of specimen collection. If data has no relevant spatial context, uncheck "Does data have a geographic coverage?".

Data identification \* What When \* Where How \* Who \* About Data sources Lodge 32%

### 4. Where

#### Geographic Coverage

Does data have a geographic coverage?



Map Satellite

North limit West limit South limit East limit

-31.984	112.894	-37.845	129.330
-19.217	146.820	-32.645	156.224

+ Add new

#### Edit Geographic Coordinates

North limit: -40.89110577329 °

West limit: 148.11923828124 ° East limit: 148.37377929687 °

South limit: -41.99141854372 °

Delete Done

To delete a bounding box, click the row of numbers to open the edit coordinates screen and choose **Delete** from the bottom left corner.

Click the pencil symbol to create a spatial bounding box, or manually enter coordinates by clicking **Add new**.

## TAB 4: Where (continued)

Add any relevant vertical spatial information (depth, or height above sea level i.e. altitude). Note that if the **vertical coverage** box is not ticked, the other vertical extent descriptors will disappear.

Data identification \*   What \*   When \*   **Where \***   How \*   Who \*   About   Data sources \*   Lodge   48%

### 4. Where

**Vertical Coverage**

Does data have a vertical (depth or altitude) component?

**Vertical type \***


Depth (distance below mean sea level) ▾

**Minimum (m) \***

6

**Maximum (m) \***

24



# TAB 5: How

Briefly describe the methodology of the data collection. A reference to a published report or paper may be provided if additional information is required.

Data identification \*   What \*   When \*   Where \*   **How \***   Who \*   About   Data sources \*   Lodge

48%

## 5: How

**Methodological information \***

Sampling involved four 50 x 2 m belt transects set within the 15-18 m depth strata in each habitat type (barrens and algal-dominated) at each site. On each transect line, a pair of divers worked to 2 m each side of the line, and for each 5 m section of the transect recorded depth; percentage cover of substratum types; percentage cover *C. rodgersii* barrens habitat; abundance of sea urchins (*C. rodgersii* and *H. erythrogramma*), rock lobster (*J. edwardsii*) and abalone (*H. rubra*); and the percentage cover of algal species or guilds. Algal cover was estimated to the nearest 5 % for each 5 x 2 m section, while species occupying less than 5 % cover were recorded as being present.

Divers classified habitat as *C. rodgersii* barrens -characterised when foliose macroalgae was lacking and locally abundant *C. rodgersii* individuals were present. Areas of grazed substratum could be discerned unambiguously. The substratum was classified either as flat rock shelves, very large boulders, large boulders, small boulders, cobble, pebble, gravel, or sand.

Transect position was recorded using a GPS point for the start and finish of each transect.

Provide a brief statement of the methods used for collection of the data, can include information regarding sampling equipment (collection hardware), procedures, and precision/resolution of data collected.

## TAB 6: Who

Add at least one Point of Contact for the data set. The Point of Contact should be able to answer any enquiries relating to the data, or redirect the enquiries to the appropriate person. Add the details of all Responsible Parties associated with the data set (note that this may be the same as the Point of Contact). A Responsible Party is usually involved with the collection of the data, but may also be a distributor or custodian of the data.

Data identification What When Where How Who About Data sources Lodge 82%

### 6: Who

Point of contact for dataset

Johnson, Craig

+ Add person

Responsible parties for creating dataset

Sanderson, Craig	-
Ling, Scott	-
Flukes, Emma	-
Dominguez, Gabriel	-

+ Add person

Click here to add new personnel details

Johnson, Craig

Contact name \*

Johnson, Craig

Enter your full ORCID researcher URL. If you don't have one yet, register at [orcid.org/register](http://orcid.org/register)

ORCID ID

<http://orcid.org/0000-0002-9511-905X>

Role \*

Principal Investigator

Begin typing the name of an organisation - if it's stored in our database, the delivery address will be automatically pre-filled for you. Details can also be manually entered. Contact us with the details of any other organisations you would like added to this list.

Organisation

IMA

Institute for Marine and Antarctic Studies (IMAS), University of Tasmania (UTAS)

Institute for Marine and Antarctic Studies (IMAS), University of Tasmania (UTAS)

School of Animal Biology (SAB), The University of Western Australia (UWA)

Antarctic Climate and Ecosystems Cooperative Research Centre (ACE CRC)

Department of Primary Industries, Parks, Water and Environment (DPIPWE), Tasmanian Government



## TAB 6: Who (continued)

Add the credits of any additional organisations associated with the data collection.

Data Identification What When Where How **Who** About Data sources Lodge 82%

### 6: Who

**Phone number**  
6666 666 666

**Fax number**  
5555 5555

**Email address \***  
Craig.Johnson@utas.edu.au

**Other credits**  
Acknowledge the contribution of any funding schemes or organisations.

Fisheries Research and Development Corporation (FRDC)

Tasmanian Association for Recreational Fishing Inc. (TARFish) ✕

Done ✕ Delete

+ Add new

Note the progress bar has turned green as all mandatory fields are now filled. All remaining fields should still be completed to ensure the Metadata record is as comprehensive as possible.

## TAB 7: About

Describe all measured parameters contained in the data set, including units of measurement (you can also add the name of the parameter as it appears in the dataset to aid a user's interpretation of the dataset). Additional information on the instrument and the platform that is associated with the parameter can also be added. Parameter name, unit of measure, instrument and platform are controlled terms from their respective AODN vocabularies.

Long name	Units	Instrument	Platform
Temperature of the water body	Degrees Celsius	water temperature sensor	mooring
Concentration of oxygen {O2} per unit volume of the water body	Cubic micrometres per litre	dissolved gas sensors	sub-surface gliders

**Add Parameter**

**Name \***

Temp

Physical-Atmosphere > Air temperature  
Dew point temperature of the atmosphere

Physical-Atmosphere > Air temperature  
Temperature of the atmosphere

Physical-Atmosphere > Air temperature  
Wet bulb temperature of the atmosphere

Physical-Atmosphere > Humidity  
Dew point temperature of the atmosphere

Select...


**Platform**

Select...

You can choose to search for your term either by scrolling down the drop down menu, or if the list is long, you can start typing your term and possible matches will be returned






## TAB 7: About (continued)

If the user selects the Browse search option, they are provided with an alternative view of the vocabulary.

 Browse parameter names x

Select a term from the vocabulary

Name \*

 Physical-Atmosphere	44
 Chemical	15
 Oxygen	3
Concentration of oxygen {O2} per unit volume of the water body	
Concentration of oxygen {O2} per unit mass of the water body	
Saturation of oxygen {O2} in the water body [dissolved phase]	
 Alkalinity	1
 Carbon	8

There are 219 terms in this vocabulary

Or define your own

Name \*

Done

Alternatively, you can select **Browse** and you will be able to search through the hierarchy of terms (select the arrow, to expose the terms underneath it).

If there isn't a suitable term, you can define our own from within the browse window, and this will be added to the vocabulary if applicable by the AODN.

## TAB 7: About (continued)

Users are able to select terms in both the Instrument and Platform vocabulary at different levels (more clearly seen whilst using the "Browse" search view). Instrument has 2 levels of hierarchy, and in Platform there is on occasion 3 levels. Common AODN practice is to mark up metadata at the higher level of the hierarchy when one exists (such as in Instrument and Platform).

**Browse parameter platforms**

Select a term from the vocabulary

**Platform**

- ▶ Radar (2)
- ▶ Mooring and buoy (120)
- ▼ Vessel (197)
  - naval vessel
  - small boat
  - ship
  - ▼ research vessel (highlighted)
    - Ramform Sovereign

There are 405 terms in this vocabulary

Or define your own

**Platform**

In the Platform vocabulary there are 3 levels within the hierarchy, and users are only able to mark metadata up at either the 2<sup>nd</sup> or 3<sup>rd</sup> level – i.e. users are unable to select "Vessel", but can select either "research vessel" or "Ramform Sovereign" – successful selection is seen in the highlighted example. The top level of the hierarchy is used in the corresponding Portal facet.

Common AODN practice is to stay at the higher level of the hierarchy, i.e. mark the metadata up the broader concept e.g. "research vessel" rather than "Ramform Sovereign" which is recognisable as an 'instance' of the broader type.

## TAB 7: About (continued)

Choose the appropriate Creative Commons (CC) license for your data. All CC licenses require work to be attributed (cited). If this is the only necessary stipulation for use of your data, we recommend Creative Commons by Attribution (CC-BY). If you have additional stipulations for the use of your data (e.g. non-commercial purposes, no derivative works), choose **CC non-commercial** or **other** and list any additional requirements.

Data identification What When Where How Who **About** Data sources Lodge 82%

### Resource constraints

**License \***

Creative Commons by Attribution (recommended) ▾

Learn more about which license is right for you at [Creative Commons](#)

**Use limitations**

Data, products and services from IMOS are provided "as is" without any warranty as to fitness for a particular purpose.

+ Add use limitation

### Supplemental information

**Publications associated with dataset**

Data paper publication about this collection: Davies, C. H. et al. A database of marine phytoplankton abundance, biomass and species composition in Australian waters. Sci. Data 3:160043 doi: 10.1038/sdata.2016.43 (2016)

+ Add publication

**Supporting Resources**

Title	URL
Data paper in Scientific Data	<a href="http://www.nature.com/articles/sdata201643">http://www.nature.com/articles/sdata201643</a>

+ Add supporting resource

### Distribution

**Data file format**

e.g. Microsoft Excel, CSV, NetCDF

**Data file format date/version**

Date format date or version if applicable

Pick a licence constraint for your data (we recommend Creative Commons by Attribution). Choose **Other** if you are unsure.

## TAB 8: Data Sources

Upload any data associated with the metadata record. This will typically be a single CSV file, but may also involve multiple files and a variety of different file formats. You may also upload any additional supporting information here (e.g. project reports, important methodological images, database schema diagrams etc.). File uploads have a maximum size of 100 MB. If your data file(s) are larger than 20 MB, proceed with the submission process as normal and reply to the confirmation email (sent when your metadata is lodged) with details of any additional files you wish to submit.

Data identification \*   What \*   When \*   Where \*   How \*   Who \*   About   **Data sources**   Lodge

50%

### 8: Upload Data

Name

The\_Australian\_Phytoplankton\_Database\_(Snapshot)\_1844.csv

Drop file here or click to upload

Maximum file size 100 MB

Upload

### Data Services

Please note: This is intended for advanced users only

Title	URL	Layer
--		

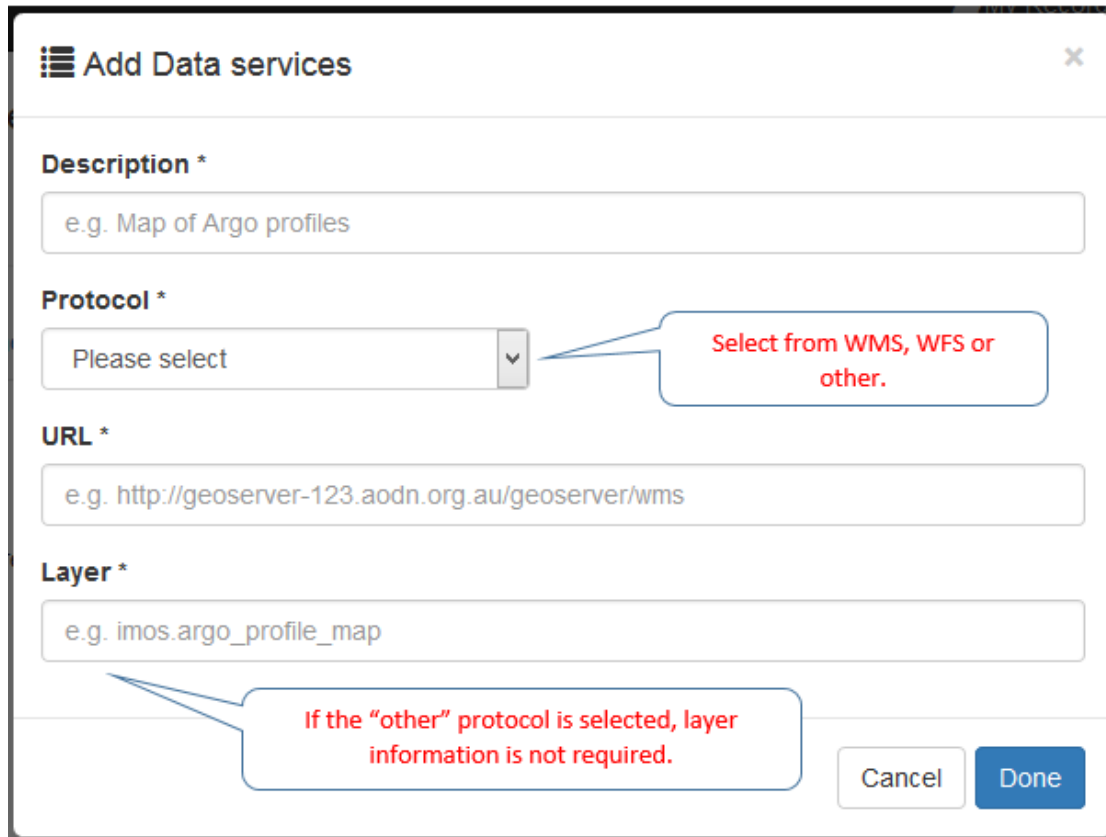
+ Add new

Users are able to provide details of online resources such as WMS, WFS that are already in place. Or can provide a link to the online location of data files, e.g. THREDDS

## TAB 8: Data Sources (continued)

For advanced users

When the user selects to add new Data Service, the following information is gathered in the pop-up. 'Other' is used to signify a link to the online location of data files, e.g. THREDDS.



The screenshot shows a pop-up window titled "Add Data services" with a close button (X) in the top right corner. The form contains the following fields and callouts:

- Description \***: A text input field containing "e.g. Map of Argo profiles".
- Protocol \***: A dropdown menu with "Please select" and a downward arrow. A callout bubble points to it with the text "Select from WMS, WFS or other."
- URL \***: A text input field containing "e.g. http://geoserver-123.aodn.org.au/geoserver/wms".
- Layer \***: A text input field containing "e.g. imos.argo\_profile\_map". A callout bubble points to it with the text "If the 'other' protocol is selected, layer information is not required."

At the bottom right of the form are two buttons: "Cancel" and "Done".

## TAB 9: Lodge metadata draft

If you have successfully completed all mandatory fields, your record will be ready to lodge (note that you will be unable to lodge the record if any mandatory fields have been left blank). The progress bar may not show 100% if some optional fields have been left blank (e.g. fax numbers, additional credits, data file versions etc. if not applicable). Have a quick check over your record and ensure you have completed as many fields as possible. Happy? Hit lodge... and you're done!

Data identification \*   What \*   When \*   Where \*   How \*   Who \*   About   Data sources \*   Lodge 48%

### 9: Lodge Metadata Draft

Are you finished? Use this page to lodge your completed metadata record.

Any difficulties? Please contact [info@aodn.org.au](mailto:info@aodn.org.au)

The Data Manager will be notified of your submission and will be in contact if any further information is required. Once approved, your data will be archived for discovery in the [AODN Catalogue](#).

How complete is your data?

**Include a note for the data manager**

**Lodge data** **Unable to lodge:** There are 18 errors which must be corrected first.

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**Want to keep a personal copy of your metadata record?**

[Click here](#) to generate an XML version of your metadata submission. The file generated includes all of the details you have provided under the tabs, but not files you have uploaded.

Please note: this XML file is not the recommended way to share your metadata. We want you to submit your data via 'lodging' the information. This permits multi-user access via the portal in a more friendly format.



## What next?

Once lodged, your record will be marked as **Submitted** on your [dashboard page](#) and you will receive an email confirming your submission. The AODN Data Manager will review your submission and be in touch to request any additional information if required. You can reply directly to your confirmation email with any queries, comments, or details of additional large data files you wish to submit. When your record has been approved, it will be uploaded to the [AODN Portal](#) or the [AODN Metadata Catalogue](#) for discovery. You will receive an email notifying you of its approval and the record's status will change to **Uploaded** on your documents dashboard.

Records may still be modified following submission, but once the record is uploaded to the AODN Portal or Metadata Catalogue you will no longer be able to edit it. If you need to modify an uploaded record, contact the AODN Data Manager ([info@aodn.org.au](mailto:info@aodn.org.au)) to notify them of any required changes.