

IMOS Deployment Database and Matlab Toolbox 1.0

Suggested metadata conventions

This document outlines conventions that should be followed when inserting deployment metadata into the deployment database. The intent of these conventions is to ease the process of generating IMOS compliant NetCDF files using the matlab toolbox. Most conventions are self explanatory, but are included for completeness.

Instruments

The fields highlighted in red in the following image must be completed:

The screenshot shows a web-based form for entering instrument data. The form is titled "Instruments" and has a blue border. At the top, there is a navigation bar with "View All Instruments Or Filter Using Drop-Down Boxes Below". Below this are two dropdown menus for "Make" and "Model", and a "Status" dropdown with a "Show All" button. The main form area has a tabbed interface with "Description", "Maintenance/Location", and "Sensors" tabs. The "Description" tab is active. It contains several input fields: "InstrumentID" (highlighted in red), "Category" (dropdown), "Make" (highlighted in red), "Model" (highlighted in red), "SerialNumber" (highlighted in red), "Asset Number", "BarCode", "Sensors", "Description", "Status", "Capability", "Purchase Date", "Expiry Date", "Asset Life (Years)", and "Comment". There is a "Get Deployment" button next to the "InstrumentID" field. To the right of the form, there is a "No Picture Available" message and an "Image:" section with an "Add/Change" button and a "Remove" button. At the bottom right, there is a "Location" section with "Start Date", "End Date", and "Location Notes" fields. The bottom of the form shows a "Record last Modified:" status and a pagination bar indicating "Record: 1 of 1".

Suggested conventions for entering data into the Instruments table are as follows:

<i>Field</i>	<i>Convention</i>	<i>Example</i>
InstrumentID	A locally unique identifier	SBE37-5073
Make	Instrument make	SEABIRD
Model	Instrument model	SBE37-IMP
SerialNumber	Instrument serial number	5073

Of particular importance is to be consistent when entering the instrument make and model. These fields are used by the matlab toolbox to automatically determine how to import data. For example, all Seabird instruments should be given a make of 'Seabird' or 'SEABIRD'. Exactly what you decide is not important, as long as you follow the same conventions every time for instruments of the same type.

Sites

The fields highlighted in red in the following image must be completed:

The screenshot shows the 'Sites' application window with the 'Site Information' tab selected. The form contains the following fields and controls:

- SITE NAME**: A text input field highlighted in red.
- SITE ID**: A text input field highlighted in red.
- Latitude**: A section containing 'Latitude degrees' (red), 'Latitude minutes' (red), and a direction dropdown (S/N) highlighted in red.
- Longitude**: A section containing 'Longitude degrees' (red), 'Longitude minutes' (red), and a direction dropdown (E/W) highlighted in red.
- Nominal Latitude**: Fields for 'Nominal Latitude degrees' and 'Nominal Latitude minutes'.
- Nominal Longitude**: Fields for 'Nominal Longitude degrees' and 'Nominal Longitude minutes'.
- Depth**: A text input field.
- Depth Description**: A text input field.
- Research Activity**: A dropdown menu.
- Description**: A large text input field highlighted in red. A hint box next to it says: "Hint: Include any terms that you would want to search on. eg. Ningaloo - Northern Edge".
- Comment**: A text input field.
- Document**: A text input field.
- Buttons**: 'Get Deployment', 'New Record', 'Add/Change', 'Remove', and 'Completed'.
- Datum**: A dropdown menu set to 'WGS84'.
- Image**: A text input field for an image URL.
- Footer**: 'Record: 1 of 1' and navigation controls.

Suggested conventions for entering metadata into the Sites table are as follows:

<i>Field</i>	<i>Convention</i>	<i>Example</i>
Site Name	The site's IMOS Platform Code, and a brief, optional description	NRSMAI Maria Island Reference Station
Site ID	A locally unique, meaningful identifier	MAI_0809
Latitude	Site latitude	42', 94.3" S
Longitude	Site longitude	148', 38.44" E
Description	A meaningful description of the site	Maria Island Reference Station

Ensuring that the Site Name contains the IMOS platform code will make population of the NetCDF metadata, and correct creation of IMOS compliant file names easier. Put as much descriptive information into the Description field as possible.

Personnel

The fields highlighted in red in the following image must be completed:

The screenshot shows a window titled "Personnel : Table". It contains a table with the following columns: StaffID, LastName, FirstName, Organisation, and Comment. The first row of the table is highlighted in red. Below the table, there is a record navigation bar showing "Record: 1 of 1".

Suggested conventions for entering data into the Personnel table are as follows:

<i>Field</i>	<i>Convention</i>	<i>Example</i>
StaffID	A locally unique identifier	PAUL_MCCA_CSIRO
LastName	Last name	McCarthy
FirstName	First Name	Paul
Organisation	Organisation	CSIRO

FieldTrip

The fields highlighted in red in the following image must be completed:

The screenshot shows a window titled "Field Trip Information". It has a tabbed interface with tabs for "Trip Details", "Trip Event Log", "Personnel", and "Images". The "Trip Details" tab is active. It contains the following fields and controls:

- Field Trip Number:** A text field highlighted in red. To its right are buttons for "New Record", "Open Deployment Form", and "Get Report".
- Start Date:** A text field highlighted in red.
- Finish Date:** A text field highlighted in red.
- Description:** A large text area highlighted in red.

At the bottom of the window, there is a record navigation bar showing "Record: 1 of 1".

Suggested conventions for entering data into the FieldTrip table are as follows:

<i>Field</i>	<i>Convention</i>	<i>Example</i>
Field Trip Number	A locally unique identifier	2432
Start Date	Field trip start date	29/1/2009
End Date	Field trip end date	7/2/2009
Description	A meaningful description	Turnaround of moorings off Maria Island

Note that the Field Trip Number will likely be changed to a text based field in a future release of the Deployment Database.

DeploymentData

The fields highlighted in red in the following images must be completed:

frmDeploymentDescription : Form

Instrument Deployment Description

Filter by Research Activity: Show All

Instrument Setup | Deployment | Recovery

Deployment Trip: Research Activity:
Recovery Trip: Site Name:
Site: Site Depth:
Site GPS: Site Description:
Station:
Deployment Type:
Make:
Instrument Model:
Instrument ID:
SensorID:
Capability:
Sample Type:
Instrument Setup:
Instrument Depth (m):
Depth Description/Datum:

[Copy and Paste Existing Sampling Setup](#)

Record: of 1 (Filtered)

☐ Complete Last Modified:

frmDeploymentDescription : Form

Instrument Deployment Description

Filter by Research Activity: [Show All](#)

Instrument Setup | Deployment | Recovery

Site:

InstrumentID:

SensorID:

Time Switch On:

Time First Wet: Time Zone:

Time First In Position:

Estimated Retrieval Date: Estimated Deployment Duration (days):

Setup By:

DeploymentId:

Record: of 1 (Filtered)

frmDeploymentDescription : Form

Instrument Deployment Description

Filter by Research Activity: [Show All](#)

Instrument Setup | Deployment | Recovery

Site:

InstrumentID:

SensorID:

Time Last In Position:

Time On Deck: Time Zone: Downloaded By:

Time Switch Off:

Time First Good Data:

Time Last Good Data:

File Name:

Link File1:

Link File2:

Comment:

Record: 1 of 1 (Filtered)

Suggested conventions for entering data into the DeploymentData table are as follows:

<i>Field</i>	<i>Convention</i>	<i>Example</i>
Deployment Trip	ID of field trip on which the instrument was deployed	1320
Recovery Trip	ID of field trip on which the instrument was recovered	2348
Site	ID of site at which the instrument was deployed	MAI_0809
Instrument ID	ID of the instrument	SBE37-5073
Instrument Depth	Depth of the instrument (metres below sea level)	23.5
Time First In Position	Time that the instrument was first in position	25/01/2009 07:34:21
Time Zone	Time zone of instrument clock (Ideally UTC)	UTC

Time Last In Position	Time that the instrument was last in position	30/03/2009 15:23:01
File Name	Name of downloaded file (space separated list if more than one file)	30035073.asc
Comment	Meaningful comment about deployment	CTD logger deployed for 2 months at Maria Island. No major problems while recovering data.

The File Name field is of particular importance, as it is used by the matlab toolbox to automatically find raw data files for a given deployment. Filling in this field will simplify the data import process. The matlab toolbox (version 1.0) does not have any capability to adjust timestamps to UTC, so the times entered here are the times which go into the metadata. Thus, setting the instrument clock to UTC, and entering metadata timestamps in UTC is strongly recommended.