



ION: INTEGRATED OBSERVATORY NETWORK  
OCEAN OBSERVATORIES INITIATIVE

**Release 1 User Guide**

V2.00





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## Table of Contents

<b>AN INTRODUCTION TO ION .....</b>	<b>1</b>
SOME HANDY THINGS TO KNOW .....	1
Registered Resource .....	1
Data Source .....	1
Metadata .....	1
Data and Data Formats .....	1
<b>GETTING STARTED WITH ION .....</b>	<b>2</b>
USE ION AS A GUEST .....	2
CREATE AN ION ACCOUNT .....	2
<b>THE BASICS .....</b>	<b>3</b>
GETTING TO KNOW YOUR WAY AROUND ION .....	3
<b>TUNE THE WORKSPACE FOR YOUR SCREEN SIZE AND WORK STYLE .....</b>	<b>4</b>
OPENING AND CLOSING THE RIGHT AND LEFT COLUMNS .....	4
EXPANDING AND COLLAPSING PANELS .....	4
<b>TEN THINGS YOU CAN DO WITH ION RELEASE 1.....</b>	<b>5</b>
1. EXPLORE OCEAN DATA .....	6
2. FIND DATA YOU WANT .....	8
3. DOWNLOAD DATA .....	10
Finding the Dataset ID.....	10
Access Using OOI-CI ION ToolsUI.....	11
OPeNDAP Access.....	11
4. REGISTER FOR AN ION ACCOUNT .....	13
5. SIGN IN TO YOUR ION ACCOUNT .....	14
6. GET NOTIFIED .....	15
7. CHANGE YOUR NOTIFICATION SETTINGS .....	16
8. GET HELP OR TALK WITH THE ION TEAM .....	17
9. REGISTER A DATA SOURCE .....	18
10. MONITOR OR MODIFY YOUR REGISTERED RESOURCES.....	20
<b>ION QUICK GUIDE .....</b>	<b>21</b>
<b>APPENDIX A SYSTEM REQUIREMENTS .....</b>	<b>25</b>

## An Introduction to ION

The Integrated Observatory Network (ION) is a national infrastructure that makes ocean data from many observing systems available to everyone, from scientists and researchers to teachers, students, and the interested public. You can access the data available in ION through the web interface: [ion-beta.oceanobservatories.org](http://ion-beta.oceanobservatories.org). There you will find tools to help you locate, learn about, evaluate, and download ocean data. You will also find tools to keep you informed of changes to data you are interested in and tools that enable you to share your data with other ION users.

### SOME HANDY THINGS TO KNOW

As you explore ION, you may find it helpful to be familiar with a few basic concepts.

#### Registered Resource

When a set of scientific data or other artifact is registered in ION, it is represented by a **Registered Resource**. In Release 1, most Registered Resources represent scientific data from one or more data sources, along with metadata that describe the source(s), the data, or both. In this document, we refer to a Registered Resource that represents a data set as a **data resource**.

#### Data Source

Data in ION may come directly from observing systems, such as instruments in or on the water, or may come by way of a laboratory or research facility where the data may be processed in some way. In ION, the **data source** simply refers to where the data are from, i.e., the source of the data. The source is usually described in the metadata.

#### Metadata

The **metadata** for a Registered Resource contain information about the data or source it represents. For example, the metadata for a particular Registered Resource for a data set may include a list of the variables included and a description of the structure of the data. This type of metadata will help you understand what you are looking at when you examine the data themselves.

Metadata also may contain information about the data source itself. So, for example, you may find information about what instruments were used to gather the data, the place where they were gathered, and what institutions or individuals are responsible for them. This type of metadata will help you establish the provenance of the data.

#### Data and Data Formats

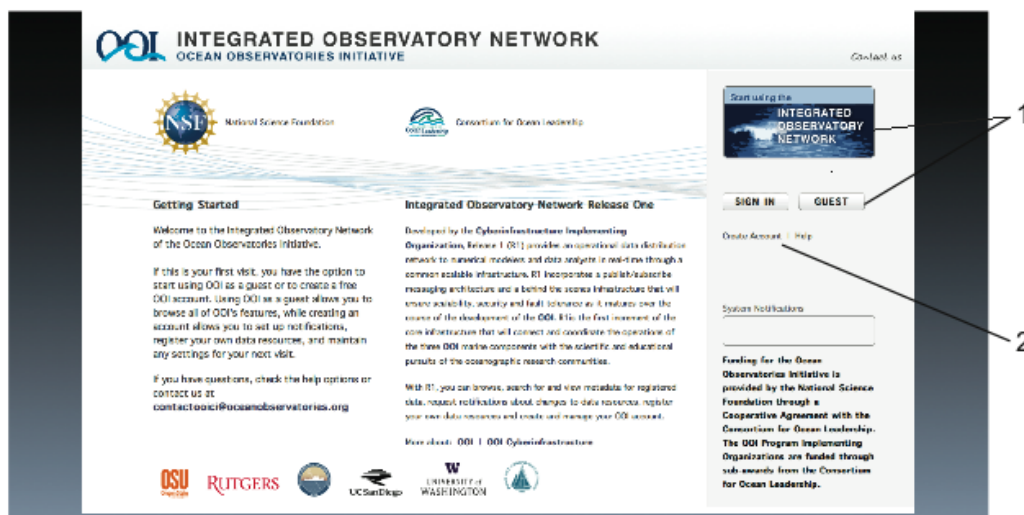
While data in ION may come from many different kinds of observing systems, may be raw or processed, and may have different kinds of metadata associated with them, all ION data and metadata are represented in **netCDF format**. You will need to know about netCDF when you want to register your own data sources with ION. For more information about netCDF and some useful tools, see

[www.unidata.ucar.edu/software/netcdf/](http://www.unidata.ucar.edu/software/netcdf/)

## Getting Started with ION

Navigate to ION in your web browser:

[ion-beta.oceanobservatories.org](http://ion-beta.oceanobservatories.org)



ION's home page ([ion-beta.oceanobservatories.org](http://ion-beta.oceanobservatories.org)) provides a brief overview of ION and of the current release, as well as links to the OOI's funding, management and implementation partners. From here, you can sign into the ION workspace as a guest or with your previously created account, or create a new ION account.

### USE ION AS A GUEST

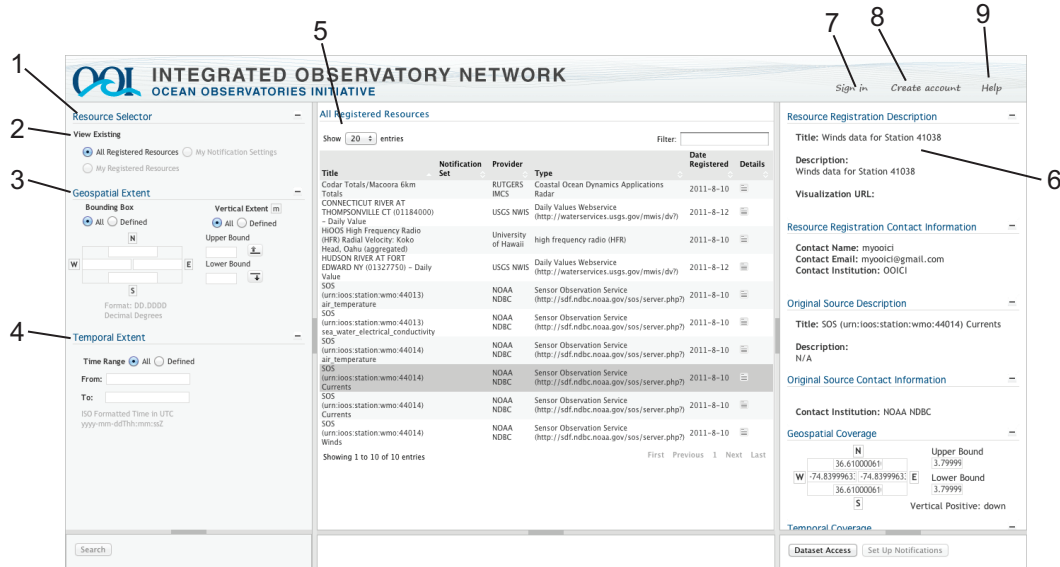
1. From the ION home page, click on either of the **Guest** or the **Start Using ION** buttons on the right side of the home page to sign in as a guest. Signing in as a guest allows you to browse ION resources and download data. To set up notifications, register data or save your settings, you will need to create an ION account.

### CREATE AN ION ACCOUNT

2. Registering for an ION account allows you to access ION's full suite of features, including setting up notifications about resources. To register, click on **Create Account** on the right side of the home page or on the upper right corner of any ION workspace page. This will direct you to an externally operated account management service that will connect your ION account to the password service of an account you already use. (Use of this external service ensures that you have better security and lets you use an existing account and password.) When this process is complete, you will be returned to the ION workspace where you will be asked to provide a little more information to finish setting up your new account.

## The Basics

The following diagram describes features of ION's main screen.



1. The left column contains tools for *finding a registered resource* by specific location or time frame.
2. View all the resources that are registered in ION.
3. Enter the lat/lon coordinates of the geographic area in which you are interested, or choose a specific vertical extent (offset from sea surface).
4. Enter the time range in which you are interested.
5. The center column allows you to *browse ION's registered resources*.
6. The right column will allow you to *access more information* about each registered resource and set other options for downloading data and creating notifications.
7. Sign in to your previously created account. (Sign out if you are signed in.)
8. Create a new ION account. This will direct you to an externally operated account management system that ensures the security of your personal information. If you are signed in, you can access your account settings here.
9. Access ION help (this document).

## GETTING TO KNOW YOUR WAY AROUND ION

The **left column** is where you will generally start working in the ION workspace. It includes the **Resource Selector**, where you decide which registered resources will be brought into the center and right columns. You can choose to view existing data, including all ION resources. If you're a registered user, you can choose to see just those registered resources you've previously registered, access notifications you've set up previously or choose to publish new data.

To search for particular data in ION by location, you can use the [Geospatial Extent Selector](#) that allows you to locate data within a geographic area by entering the coordinates for that region or choosing vertical extent above or below sea level. The [Temporal Extent Selector](#) allows you to specify a time range for the data you would like ION to display in the center column. You can use these tools separately or in any combination that meets your needs.

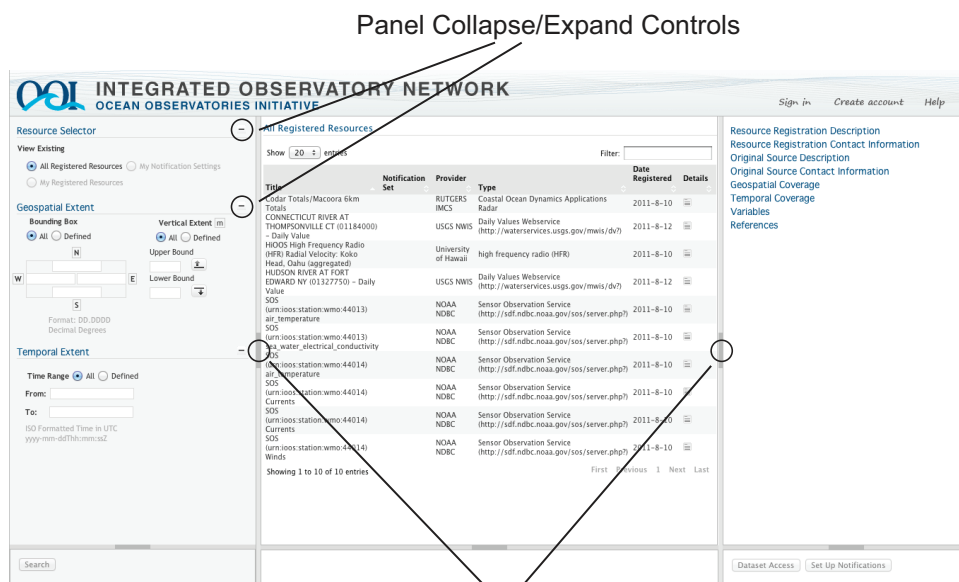
The **center column** lists all of ION's registered resources in alphabetical order by title, or, if you have double-clicked on one of them, details about that resource. In this area you will also view your notification settings and list any resources you have registered with ION.

The **right column** is where you will find preview information about a selected resource, as well as options to download data, set up notifications and edit metadata and notification settings, depending upon what you've selected in the left column.

## Tune the Workspace for Your Screen Size and Work Style

### OPENING AND CLOSING THE RIGHT AND LEFT COLUMNS

The left and right columns may be closed to make more room to view information in the other columns. To close a column, click on the open/close handle. Click on it again to reopen the column.



### EXPANDING AND COLLAPSING PANELS

Each horizontal panel in the right and left columns may be collapsed to make more room to view other panels in the column and then reopened again when desired, using the + and - controls in the title area of the panel.

## Ten Things You Can Do With ION Release 1

1. Explore Ocean Data
2. Find Data You Want
3. Download Data
4. Register for an ION Account
5. Sign In to Your ION Account
6. Get Notified
7. Change Your Notification Settings
8. Get Help
9. Register a Data Source
10. Monitor or Modify Your Registered Resources



## 1. EXPLORE OCEAN DATA

Browse ION's resources; here you'll find everything from historical sea-surface temperature time-series, to real-time seismic data, to OOI global buoy data.

1. Start with the default settings in panels in the left column:

- **Resource Selector** radio buttons set to **All Registered Resources**
- **Geospatial Extent** radio buttons set to **All** (for **Bounding Box** as well as **Vertical Extent**)
- **Temporal Extent** radio buttons set to **All**

2. With these settings, the center column lists all of the registered resources currently available to you in ION.

search is now an option

details icon

"dataset access" and "setup notifications" are now options

Title	Notification Set	Provider	Type	Date Registered	Details
Cedar Totals/Macora 6km Totals		RUTGERS IMCS	Coastal Ocean Dynamics Applications Radar	2011-8-10	
CONNECTICUT RIVER AT THOMPSONVILLE CT (01184000)		USGS NWIS	Daily Values Webservice (http://waterservices.usgs.gov/nwis/dv/)	2011-8-12	
- Daily Value					
WQOS High Frequency Radio (HFR) Radial Velocity: Koko Head, Oahu (aggregated)		University of Hawaii	high frequency radio (HFR)	2011-8-10	
Hudson River At Fort Edward NY (01327750) - Daily Value		USGS NWIS	Daily Values Webservice (http://waterservices.usgs.gov/nwis/dv/)	2011-8-12	
SOS (urn:ioos:station:wmo:44013) air temperature		NOAA NDBC	Sensor Observation Service (http://sdf.ndbc.noaa.gov/sos/server.php?)	2011-8-10	
SOS (urn:ioos:station:wmo:44013) sea water electrical conductivity		NOAA NDBC	Sensor Observation Service (http://sdf.ndbc.noaa.gov/sos/server.php?)	2011-8-10	
SOS (urn:ioos:station:wmo:44014) air temperature		NOAA NDBC	Sensor Observation Service (http://sdf.ndbc.noaa.gov/sos/server.php?)	2011-8-10	
SOS (urn:ioos:station:wmo:44014) currents		NOAA NDBC	Sensor Observation Service (http://sdf.ndbc.noaa.gov/sos/server.php?)	2011-8-10	
SOS (urn:ioos:station:wmo:44014) currents		NOAA NDBC	Sensor Observation Service (http://sdf.ndbc.noaa.gov/sos/server.php?)	2011-8-10	
SOS (urn:ioos:station:wmo:44014) winds		NOAA NDBC	Sensor Observation Service (http://sdf.ndbc.noaa.gov/sos/server.php?)	2011-8-10	

3. Single click on any registered resource in the list to select it and view additional information about it in the right column.

Annotations for the Resource Registration Description panel:

- brief description of data**: Points to the Description field.
- contact information of person who registered the resource with ION**: Points to the Resources Registration Contact Information section.
- text from original data source**: Points to the Original Source Description section.
- contact information of the original data collector**: Points to the Original Source Contact Information section.
- coordinates**: Points to the Geospatial Coverage section.
- time range**: Points to the Temporal Coverage section.

- To see more information about this registered resource, click once on (the details icon) for the listing. The center column view changes to show all of the resource's metadata.

The screenshot shows the ION interface with the following sections:

- Resource Selector**: Includes filters for View Existing (All Registered Resources, My Notification Settings, My Registered Resources) and Geospatial Extent (Bounding Box, Vertical Extent).
- Metadata for SOS (urn:ioos:station:wmo:44014) Currents**: Displays detailed information including title, description, visualization URL, contact information, geospatial extent, temporal coverage, and variables.
- Resource Registration Description**: Provides a detailed view of the resource's metadata, including title, description, contact information, geospatial coverage, and temporal coverage.

- You can examine the variables in a data resource by clicking on the **Dataset Access** button at the bottom of the right column. (This takes you to a page outside the ION interface with a traditional data access form.)
- Finally, click on (list icon) on the upper right of the center column to return to the full resource list. Shortcut: If you want to see the same detailed information about the next resource on the list, instead of going back to the list to select it, simply click on (next icon). To see the details of the previous resource click on (previous icon).





## 2. FIND DATA YOU WANT

Search for a registered resource in a specific geographic area, vertical extent or collected during a particular time frame. Then choose your specific registered resource or resources from the resulting list.

1. In the Resource Selector panel:

Under the **View Existing** heading, select **All Registered Resources**.

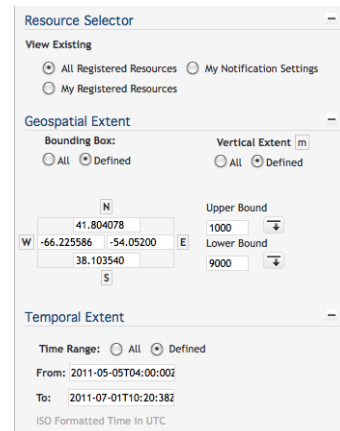
2. To search for registered resources within a specific geographic area, click on the “Defined” radio button under Bounding Box, and then enter your coordinates in decimal degrees in the **Geospatial Extent** panel under **Bounding Box**. You can click on the **N/S/E/W** buttons to toggle the direction or use negative numbers if you prefer (so 10N is the same as -10S, for instance).

3. To search for registered resources within a specific vertical extent, in the **Geospatial Extent** panel, click on the “Defined” radio button under “Vertical Extent,” and then enter your range. You can toggle the units button (to the right of the “Vertical Extent” section title) to use either meters (**m**) or feet (**ft**). You can also toggle the above  and below  sea level buttons to select the direction or use negative numbers if you prefer (so 10  is the same as -10 , for instance).

4. To search for registered resources within a specific time frame, click on the “Defined” radio button under Temporal Extent, and then enter the dates of your desired range in the Temporal Extent box. A calendar and slider bars will appear when you click on the entry field to support entering the date and time ranges.

You can search using any combination of steps 8, 9, and 10 above. If you enter multiple conditions, only registered resources that meet all of them will be returned.

5. Your search return entries appear in the center column in alphabetical order by title. Here you can sort by title, provider, type or date registered by clicking on the relevant term in the column header.



The screenshot shows the 'Resource Selector' panel with the following settings:

- View Existing:** ☒ All Registered Resources, ☐ My Notification Settings, ☐ My Registered Resources
- Geospatial Extent:**
  - Bounding Box:** ☐ All, ☒ Defined. Coordinates: N: 41.804078, S: 38.103540, W: -66.225586, E: -54.05200.
  - Vertical Extent:** ☐ All, ☒ Defined. Units: **m**. Upper Bound: 1000, Lower Bound: 9000.
- Temporal Extent:** ☐ All, ☒ Defined. Time Range: From: 2011-05-05T04:00:00Z, To: 2011-07-01T10:20:38Z. ISO Formatted Time in UTC.



**INTEGRATED OBSERVATORY NETWORK**  
OCEAN OBSERVATORIES INITIATIVE

Sign in Create account Help

**Resource Selector**

View Existing  
☒ All Registered Resources ☐ My Notification Settings  
☐ My Registered Resources

**Geospatial Extent**

Bounding Box  
☒ All ☐ Defined

Vertical Extent (m)  
☒ All ☐ Defined

Upper Bound  
Lower Bound

Format: DD.DDDDD  
Decimal Degrees

**Temporal Extent**

Time Range ☒ All ☐ Defined

From:   
To:   
ISO Formatted Time in UTC  
yyyy-mm-ddTHH:mm:ssZ

**All Registered Resources**

Show 20 entries Filter:

Title	Notification Set	Provider	Type	Date Registered	Details
Codar Totals/Macora 6km Totals		RUTGERS IMCS	Coastal Ocean Dynamics Applications Radar	2011-8-10	
CONNECTICUT RIVER AT THOMPSONVILLE CT (01184000) - Daily Value		USGS NWIS	Daily Values Webservice (http://waterservices.usgs.gov/nwis/dv/)	2011-8-12	
HHDS High Frequency Radio (HFR) Radial Velocity: Koko Head, Oahu (aggregated)		University of Hawaii	high frequency radio (HFR)	2011-8-10	
HUDSON RIVER AT FORT EDWARD NY (01327750) - Daily Value		USGS NWIS	Daily Values Webservice (http://waterservices.usgs.gov/nwis/dv/)	2011-8-12	
SOS (urn:ioos:station:wmo:44013) air_temperature		NOAA NDBC	Sensor Observation Service (http://sdf.ndbc.noaa.gov/sos/server.php)	2011-8-10	
SOS (urn:ioos:station:wmo:44013) sea_water_electrical_conductivity		NOAA NDBC	Sensor Observation Service (http://sdf.ndbc.noaa.gov/sos/server.php)	2011-8-10	
SOS (urn:ioos:station:wmo:44014) air_temperature		NOAA NDBC	Sensor Observation Service (http://sdf.ndbc.noaa.gov/sos/server.php)	2011-8-10	
SOS (urn:ioos:station:wmo:44014) Currents		NOAA NDBC	Sensor Observation Service (http://sdf.ndbc.noaa.gov/sos/server.php)	2011-8-10	
SOS (urn:ioos:station:wmo:44014) Currents		NOAA NDBC	Sensor Observation Service (http://sdf.ndbc.noaa.gov/sos/server.php)	2011-8-10	
SOS (urn:ioos:station:wmo:44014) Winds		NOAA NDBC	Sensor Observation Service (http://sdf.ndbc.noaa.gov/sos/server.php)	2011-8-10	

Showing 1 to 10 of 10 entries First Previous 1 Next Last

**Resource Registration Description**

Title: Winds data for Station 41038

Description: Winds data for Station 41038

Visualization URL:

**Resource Registration Contact Information**

Contact Name: myooici  
Contact Email: myooici@gmail.com  
Contact Institution: OOI/CI

**Original Source Description**

Title: SOS (urn:ioos:station:wmo:44014) Currents

Description: N/A

**Original Source Contact Information**

Contact Institution: NOAA NDBC

**Geospatial Coverage**

Upper Bound  
Lower Bound  
Vertical Positive: down

**Temporal Coverage**

Dataset Access Set Up Notifications

column header

details icon

### 3. DOWNLOAD DATA

Our goal for ION is to be able to deliver exactly the data and information you need, when and where you want it. However, if you need to download the data, you can do so either by using the OOI-CI ION ToolsUI or through OPeNDAP Access. Regardless of which you use, beware that a data set can be very large and downloading it in its entirety can take a *very* long time.

#### Finding the Dataset ID

To download ION data you will need the **Dataset ID** of the data set you want.

1. Go to the metadata details view in ION for the data set you want (see “1. Explore Ocean Data”).
2. Scroll to the very bottom of the metadata in the center panel:

**Resource Selector**

View Existing

☒ All Registered Resources ☐ My Notification Settings

☐ My Registered Resources

**Geospatial Extent**

Bounding Box

☒ All ☐ Defined

Vertical Extent (m)

☒ All ☐ Defined

Upper Bound

Lower Bound

Format: DD.DDDD  
Decimal Degrees

**Temporal Extent**

Time Range ☒ All ☐ Defined

From:

To:

ISO Formatted Time in UTC  
yyyy-mm-ddThh:mm:ssZ

**Dataset ID**

Dataset Id:  
DA3B94A6-FB46-48C5-BD61-BC057CB2B019

**Resource Registration Description**

Title: HIOOS High Frequency Radio (HFR) Radial Velocity: Koko Head, Oahu (aggregated)

Description:  
High frequency (HF) radios are used to measure surface currents along the south shore of Oahu to a distance of at least 100 km (62 mi) offshore with an averaging time of 15 minutes. They consist of a low-power transmitter (less than 30 watts, or less than half the power of a standard household light bulb) sending radio waves in the 10-150 MHz frequency band, and receivers that listen for the signal reflected back from the ocean waves. The return signal is Doppler-shifted by wave propagation (motion) and by surface currents, and also contains information on wind direction and the wave spectrum. This information can be used to aid in spill tracking, search and rescue (SAR), vessel routing and navigation, and forecast modeling. While considerable effort has been made to implement all data components in a thorough, correct, and accurate manner, numerous sources of error are possible. As such, please use these data with the caution appropriate for any ocean related activity.

Visualization URL:

**Resource Registration Contact Information**

Contact Name: myooci  
Contact Email: myooci@gmail.com  
Contact Institution: OOI/CI

**Dataset Access** **Set Up Notifications**

## Access Using OOI-CI ION ToolsUI

### Set Up OOI-CI ION toolsUI

1. Download the OOI-CI version of toolsUI from

<http://ooci.net/releases/toolsUI-4.2-ion.jar>

2. Download the R1 ooci-conn.properties file

<http://ooci.net/releases/ooci-conn.properties>

and put it in your user's home directory:

- On Mac: /Users/<username>
- On Windows
  - XP: <root>\Documents and Settings\<username>
  - Vista & 7: <root>\Users\<username>
- For other OS's, refer to: [http://en.wikipedia.org/wiki/Home\\_directory](http://en.wikipedia.org/wiki/Home_directory)

### Use OOI-CI ION toolsUI

1. Launch the toolsUI GUI application from the command line with:

```
java -Xmx512m -jar toolsUI-4.2-ion.jar
```

2. In the 'Viewer' tab, enter the prefix "ion:/" followed by the **Dataset ID** of the data set of interest and then hit Enter/Return:

```
ion: / <Dataset ID>
```

3. You can now interrogate the dataset, view data (right-click on a variable and select "Ncdump Data"), and view metadata (click the "NcDump" button)
4. You can use the other tabs in the application to view the dataset in different ways.

For further information about the functionality provided by ToolsUI, visit the Unidata website:

<http://www.unidata.ucar.edu/software/netcdf-java/documentation.htm>

### OPeNDAP Access

All of the public datasets in the ION R1 system are available through OPeNDAP. Access to a particular dataset can be obtained by placing the appropriate **Dataset ID** into the following string concatenation:

<http://thredds.oceanobservatories.org/thredds/dodsC/oociData/> + <dataset\_id> + .ncml

This OPeNDAP URL can be used with any software that supports the OPeNDAP protocol, including:

- ncks

- ncdump
- netcdf (C & Java libraries)
- IDV
- toolsUI

The following sites provide information and links to additional software packages for working with NetCDF Data, some of which support OPeNDAP access:

<http://www.unidata.ucar.edu/software/netcdf/software.html>

[http://www.esrl.noaa.gov/psd/data/gridded/using\\_dods.html#software](http://www.esrl.noaa.gov/psd/data/gridded/using_dods.html#software)

The “Clients” sections of:

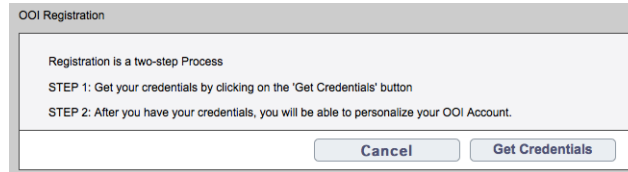
<http://opendap.org/download/allsoftware>

<http://opendap.org/othersoftware>

#### 4. REGISTER FOR AN ION ACCOUNT

You'd like to register for an ION account.

1. In the upper right corner of any ION screen, click on **Create Account**. The ION Registration box pops up in the center column.



ION Registration

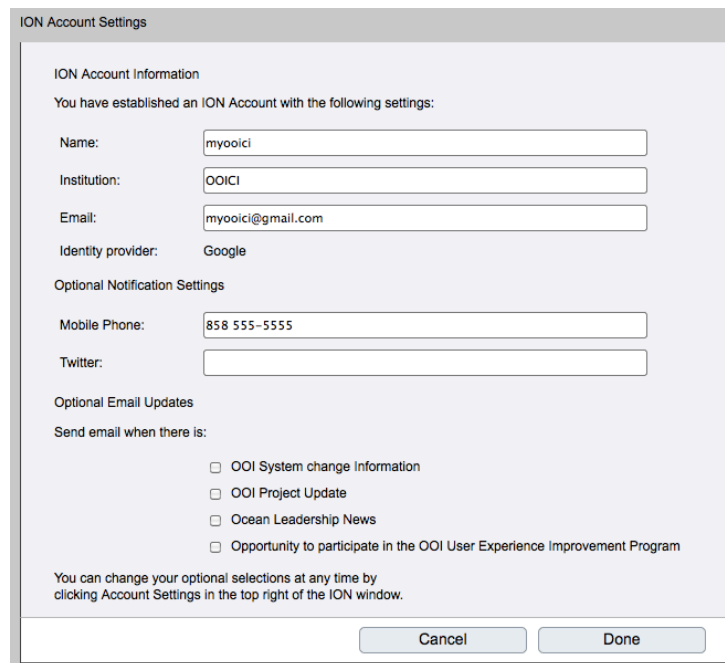
Registration is a two-step Process

STEP 1: Get your credentials by clicking on the 'Get Credentials' button

STEP 2: After you have your credentials, you will be able to personalize your OOI Account.

Cancel Get Credentials

2. Note that by clicking on **Get Credentials**, you will be leaving the ION workspace for an outside credentialing provider. Follow the instructions there, and return to ION.
3. An ION Account Settings panel is now visible as a pop-up window on the ION screen. Enter your information and click **Done**. Note that you must provide Name, Institution and Email information. The Email address you use here does not have to be associated with the same account or provider that you used for your password.



ION Account Settings

ION Account Information

You have established an ION Account with the following settings:

Name: myooci

Institution: OOI

Email: myooci@gmail.com

Identity provider: Google

Optional Notification Settings

Mobile Phone: 858 555-5555

Twitter:

Optional Email Updates

Send email when there is:

☐ OOI System change Information

☐ OOI Project Update

☐ Ocean Leadership News

☐ Opportunity to participate in the OOI User Experience Improvement Program

You can change your optional selections at any time by clicking Account Settings in the top right of the ION window.

Cancel Done

4. When you return to ION after setting up an account and want to modify your account, click on **Account Settings** in the upper right corner of any ION screen.



## 5. SIGN IN TO YOUR ION ACCOUNT

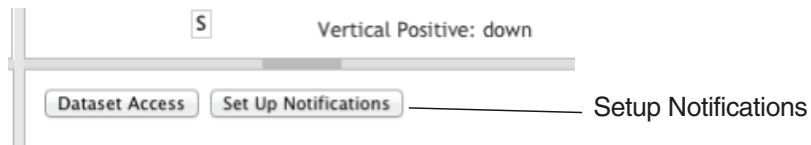
You'd like to sign in to an ION account you have set up previously.

1. In the upper right corner of any ION screen, click on [Sign in](#). What happens next depends on whether you asked for your choices to be remembered by the account service management system the last time you signed in.
2. You may be asked to select your Identity provider. Select the provider you used when you set up your account.
3. If your provider permits multiple identities, you may be asked to select which you would like to use. Select the identity you used when you set up your account.
4. You should now be returned to the main ION screen.

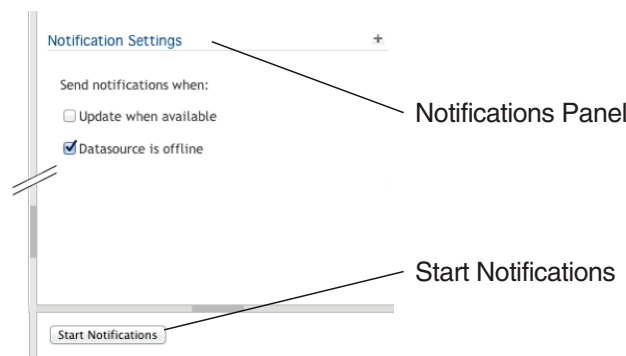
## 6. GET NOTIFIED

You've found a registered resource that interests you and you want to be notified if anything changes about the resource.

1. Sign in to your account (you must have created an account earlier to perform this function).
2. Find the registered resource about which you want notifications so that it is either selected in list view, or its details are showing in the center column. (For help in finding a data resource, see "2. Find Data You Want.")



3. Click on **Set Up Notifications** in the lower left corner of the right column. The right column view now shows a notification settings panel.



4. In Release 1 of ION, you can choose to be notified when data or metadata have changed, or when the data source or sources go offline preventing delivery of new data.
5. Check the box or boxes for the notifications you would like to receive. To save your settings, click on the **Start Notifications** button at the bottom of the right column. When the events you have selected occur, notifications will be sent to the email address you provided in your account settings. (To change this address, see "4. Register for an ION Account")

## 7. CHANGE YOUR NOTIFICATION SETTINGS

You've set up notifications about a registered resource or resources, and you want to view or modify them.

1. Sign in to your account.
2. In the **Resource Selector** panel in the left column, select **My Notification Settings**. The center column now shows notifications you have set up previously.
3. You can search for notifications associated with specific registered resources by using the Geospatial Extent and Temporal Extent panels in the left column, just as you searched for the registered resources themselves (see "2. Find Data You Want").
4. To view or modify a notification, select it. The setting details for that resource are now shown in the right column.

**Notification Settings**

**Notification Settings view**

**My Notification Settings**

5. If you want to make changes to specific settings for that notification, make them in the right column and click **Save Changes** at the bottom of the right column.
6. If you want to delete a notification setting, select it by checking the checkbox to the left in the center column and then click **Delete Selected** at the bottom of the center column. (Note that you may use **Select All** and **Deselect All** here as well to select or deselect the entire list of notifications.)

## 8. GET HELP OR TALK WITH THE ION TEAM

If you find that you need help with the ION system, you can email us at

[helpdesk@oceanobservatories.org](mailto:helpdesk@oceanobservatories.org)

If you need another copy of this guide (or know someone who does), you can download it using the **Help** link on any ION screen.

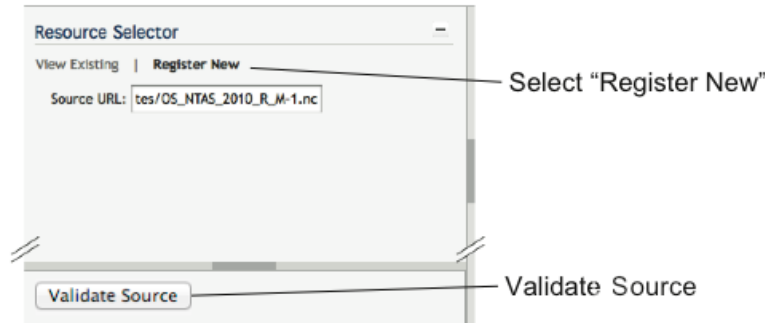
If you'd like to make suggestions or tell us how we are doing, please send your comments to:

[contactooici@oceanobservatories.org](mailto:contactooici@oceanobservatories.org)

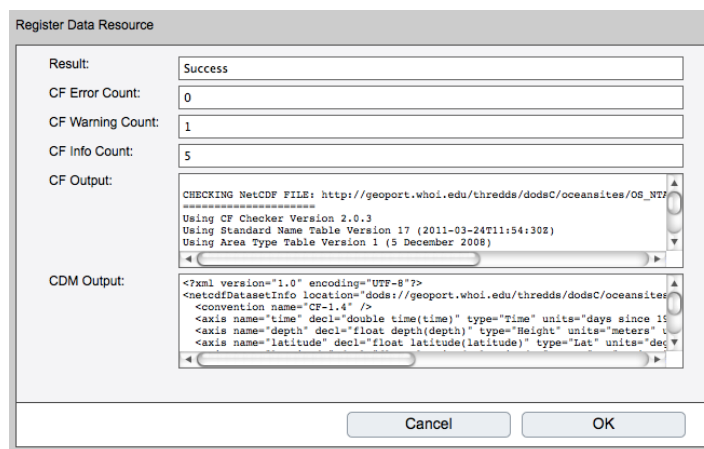
## 9. REGISTER A DATA SOURCE

If you are an OOI Data Provider, you can register an existing netCDF-compliant data source to make it available in ION. You can also register a URL associated with the data source, and edit, review or enter metadata and other information about your resource.

1. In the **Resource Selector** section of the left column, click on **Register New**. This displays the Source URL field.



2. Enter the source URL of the data source you want to register in the Source URL field. When you click **Validate Source** at the bottom of the left column, ION will check that your data source is netCDF compliant and displays the result in a pop-up window.



3. Your validated netCDF-compliant data source's metadata now appears in the center column, and summary metadata associated with your source appears in the right column.

Resource Registration Description

Title:

Description:

Visualization URL:

Resources Registration Contact Information

Contact Name:

 myoici
 

Contact Email:

 myoici@gmail.com
 

Contact Institution:

 OOI

Resources Availability Settings

☒ Resource is private and available to me only
 ☐ Resource is publicly available

Resources Polling Settings

Polling Interval

☐ Poll resource every:  DD:HH:MM
 ☒ Do not poll the resource

Original Source Description

Title:

 NTAS 10 Real-time Mooring Data, System 1
 

Description:

 Real-time surface data from ASIMet system 1 on the tenth Northwest Tropical Station (NTAS) observatory.

Original Source Contact Information

Register Resource

4. Enter, review or edit the information in the right column, including the title the ION should display for the registered resource, description, your contact information, how the resource will be made available (private or public), polling options and provenance information. When finished, click on **Register Resource**.

## 10. MONITOR OR MODIFY YOUR REGISTERED RESOURCES

You've registered a resource, and you want to view or modify it.

1. In the left column in the resource selector, choose **My Registered Resources**. The center column now lists resources you have previously registered. (Note that the Geospatial and Temporal Extent settings apply to all resource views, so set them to All to be sure that all the resources that you registered will be displayed in the center column.)
2. You can search for specific resources you have registered by using the Geospatial Extent and Temporal Extent panels in the left column, just as you searched for specific data resources (see "2. Find Data You Want").
3. To view or modify a registered resource, select it. The information associated with that resource is now shown in the right column.

The screenshot displays the ION Resource Selector interface. On the left, the 'Resource Selector' panel shows 'My Registered Resources' selected. Below it are 'Geospatial Extent' and 'Temporal Extent' settings. The center panel, 'My Registered Resources', shows a table of resources with columns for 'Active', 'Availability', 'My Registration Title', 'Original Source Title', 'Publication Date', and 'Details'. The right panel shows the 'Resource Registration Description' and 'Resource Registration Contact Information' for a selected resource.

Active	Availability	My Registration Title	Original Source Title	Publication Date	Details
<input checked="" type="checkbox"/>	Public	Satellite radiometer observation NOAA/POES AVHRR instrument	Satellite radiometer observation NOAA/POES AVHRR instrument	2011-8-14	
<input checked="" type="checkbox"/>	Public	Currents for Station 44014	SOS (urn:ioos:station:wmo:44014)	2011-8-12	
<input checked="" type="checkbox"/>	Public	USGS Daily Value for Station 01491000	Delaware River at Trenton NJ (01491000) - Daily Value	2011-8-14	
<input checked="" type="checkbox"/>	Public	USGS Daily Value for Station 01491000	CHOPTANK RIVER NEAR GREENSBORO MD (01491000) - Daily Value	2011-8-14	
<input checked="" type="checkbox"/>	Public	sea, water, electrical, conductivity data for Station 44013	SOS (urn:ioos:station:wmo:44013)	2011-8-12	
<input checked="" type="checkbox"/>	Public	USGS Test ingest	sea, water, electrical, conductivity CONNECTICUT RIVER AT THOMPSONVILLE CT (01184000) - Instantaneous Value	2011-8-17	
<input checked="" type="checkbox"/>	Public	USGS Daily Value for Station 01357500	MOHAWK RIVER AT CONDES NY (01357500) - Daily Value	2011-8-14	
<input checked="" type="checkbox"/>	Public	Cedar Totals/Macora 6km Totals	Cedar Totals/Macora 6km Totals	2011-8-12	
<input checked="" type="checkbox"/>	Public	Near-Real Time Surface Ocean Velocity	Near-Real Time Surface Ocean Velocity	2011-8-15	
<input checked="" type="checkbox"/>	Public	USGS Daily Value for Station 01184000	CONNECTICUT RIVER AT THOMPSONVILLE CT (01184000) - Daily Value	2011-8-14	
<input checked="" type="checkbox"/>	Public	USGS Daily Value for Station 03041850	APOMATTOX RIVER AT MATOACA VA (03041850) - Daily Value	2011-8-14	
<input checked="" type="checkbox"/>	Public	USGS Daily Value for Station 01362500	ESOPUS CREEK AT COLD BROOK NY (01362500) - Daily Value	2011-8-14	
<input checked="" type="checkbox"/>	Private	Inshore Mooring Test II: Xeos Sable 500 Beacon Data	Inshore Mooring Test II: Xeos Sable 500 Beacon Data	2011-8-12	
<input checked="" type="checkbox"/>	Public	Cedar Totals/Macora 6km Totals	Cedar Totals/Macora 6km Totals	2011-8-16	
<input checked="" type="checkbox"/>	Public	USGS Daily Value for Station 01646500	POTOMAC RIVER NEAR WASH DC LITTLE FALLS PUMP STA (01646500) - Daily Value	2011-8-14	
<input checked="" type="checkbox"/>	Private	Inshore Mooring Test II: Sea Surface Estimated Chlorophyll Concentration	Inshore Mooring Test II: Sea Surface Estimated Chlorophyll Concentration	2011-8-12	
<input checked="" type="checkbox"/>	Public	HOOS High Frequency Radio (HFR) Radial Velocity: Koko	HOOS High Frequency Radio (HFR) Radial Velocity: Koko Head, Doha	2011-8-12	

4. If you want to make changes to specific settings for a registered resource, make them in the right column and click **Save Changes** in the lower right corner.
5. If you want to remove a registered resource from ION, select it by checking the checkbox on the left in the center column and then click **Delete Selected** at the bottom of the center Column. (Note that you can **Select All** and **Deselect All** here as well to select and deselect the entire set of resources).

## ION Quick Guide

Browse ION registered resources

In the left column, select **View Existing** in the Resource Selector. Set options for all selectors in the left column to “all.” All ION resources appear in list view in the center column. Use the scroll bar on the right of the center column, your mouse or your keyboard up/down keys to browse the list.

Contact ION help desk

Email [helpdesk@oceanobservatories.org](mailto:helpdesk@oceanobservatories.org)

Data resources, browse

See “Browse ION registered resources” above.

Data resources, find by location

To search for data within a specific geographic location, enter coordinates into the N, W, E, W boxes in the **Geospatial Extent** section of the left column. To limit the search by vertical extent, enter the upper and lower bounds under **Vertical Extent**. If you have multiple search conditions set, only registered resources that meet all of them will be returned.

Data resources, find by time

To search for data within a specific time frame, enter the time range of interest in the **Temporal Extent** panel in the left column. The results return in the center column. If you have multiple search conditions set, only registered resources that meet all of them will be returned.

Data resource, metadata view

Clicking on the Details icon to the right of a resource in the center column shows the metadata of that resource in the center column.

Data resource, notifications

Select a registered resource in the center column by either clicking on it once or by clicking on the Details icon to the right of the resource. In the lower right corner of the right column, click on **Set Up Notifications**. Select desired notification settings that appear in the right column and click **Start Notifications**. You must be signed in to add or remove notifications.



Data, polling options	<p>Polling (the frequency that ION polls a data source for changes) can be set by the registrant when registering a new resource or when modifying the settings of a resource previously registered. For setting polling when registering a new resource, see “Data, register a data source” below. For setting polling for an already registered resource, choose <b>My Registered Resources</b> in the left column, select the resource in the center column, and then set polling options in the right column. Click <b>Save Changes</b> to activate the new settings.</p>
Data resource, register	<p>In the <b>Resource Selector</b> in the right column, select <b>Register New</b>. Choose <b>Source URL</b> and enter the URL of the source data and click <b>Validate Dataset</b>. ION will check that the data source is netCDF compliant. The validated netCDF-compliant data source’s metadata now appears in the center column, and summary metadata associated with the resource appears in the right column. Fill out the information in the right column, and click <b>Register Resource</b> in the lower right corner to create a new registered resource. You must be signed in to register a source.</p>
Data resources, view all resources in ION	<p>See “Browse ION data” above.</p>
Geospatial selector	<p>Use this selector tool in the left column to limit the resources shown in the center column to a specific geographic area or vertical extent, or a combination of the two.</p>
Help	<p>Access help topics in the upper right corner of the ION workspace, or contact ION help. See “Contact ION help desk” above.</p>
ION account, modify existing	<p>After creating an ION account, access <b>Account Settings</b> in the upper right corner of the workspace.</p>
ION account, register	<p>Click on <b>Create Account</b> in upper right corner of the workspace or the ION Home Page to obtain an ION account. An externally operated account management system manages ION account verification, ensuring security of personal information.</p>

Metadata, enter	When registering a new data source or editing a previously registered resource, metadata fields are available in the right column when that resource is selected. These include publisher information, creator information, polling options, geographic boundaries, temporal extent and title and description. Sign in required.
Metadata, view	See “Data, metadata view” above.
Notifications, modify	Choose <b>My Notification Settings</b> in the Resource Selector at the top of the left column. Registered resources previously set up with notifications appear in the center column. Click on a particular resource to modify notification settings in the right column. Sign in required.
Notifications, monitor	See “Notifications, modify” above.
Notifications, set up	With the registered resource of interest selected in the center column, click on the <b>Set Up Notifications</b> button in the lower right of the right column. Notification options appear in the right column; select desired options and click “ <b>save changes</b> ” in lower right. Sign in required.
Register new data	See “Data, register a data source” above.
Register, data source	See “Data, register a data source” above.
Register, ION account	See “ION account, register” above.
Set up download	See “Data, download” above.
Sign In	Sign In and Sign Out of ION in the upper right corner of the workspace.
Temporal extent	Use this selector tool in the left column to limit the registered resources shown in the center column to a specific time frame.

Vertical extent

Use this selector tool in the left column to limit the registered resources shown in the center column to a specific, vertical range.

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## Appendix A System Requirements

The Integrated Observatory Network (ION) runs on the following browsers:

- IE 8, IE 9 on Windows 7
- Firefox 3.6.19, Firefox 5 on Windows 7, Mac OS X 6 & 7, and Linux (Ubuntu)
- Chrome 12, Chrome 13, on Windows 7, Mac OS X 6 & 7
- Chrome 12 on Linux (Ubuntu)
- Safari 5.x on Mac OS X 6 & 7