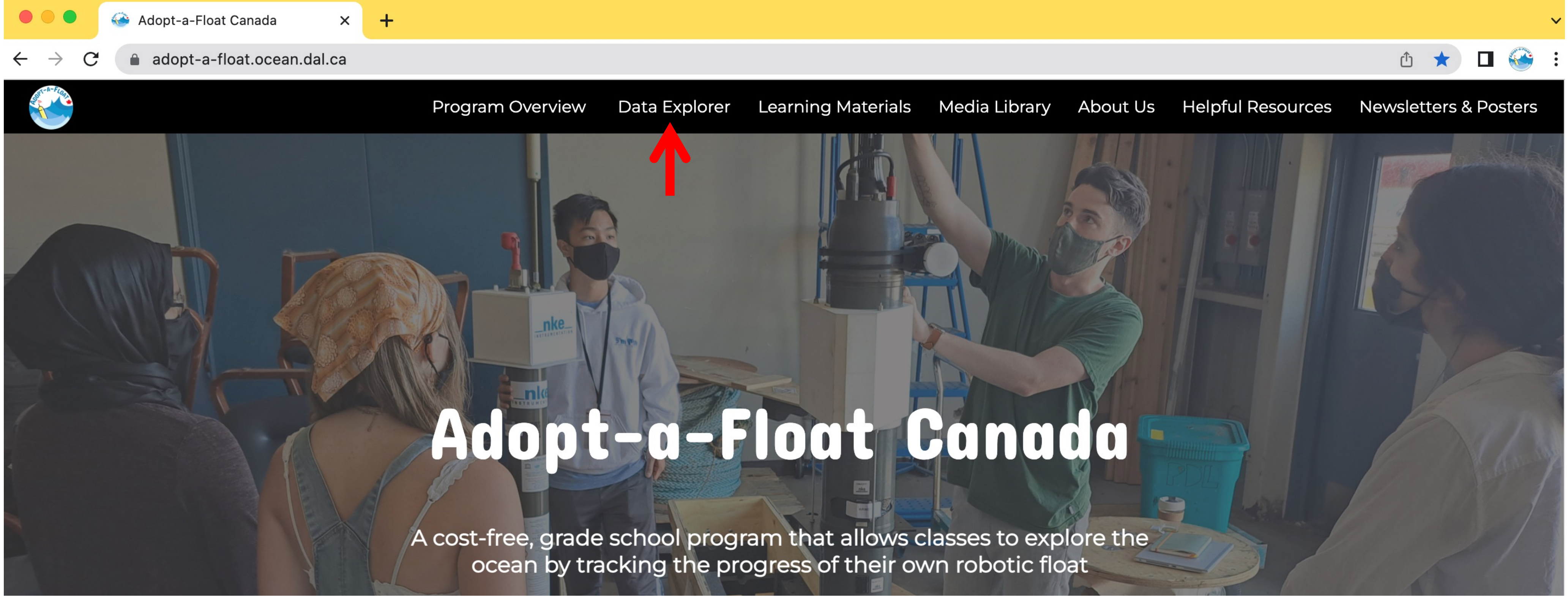
Data Access & Visualization Tutorial

Follow this step-by-step guide to learn how to view and download your adopted float’s data.

ADOPT-A-FLOAT

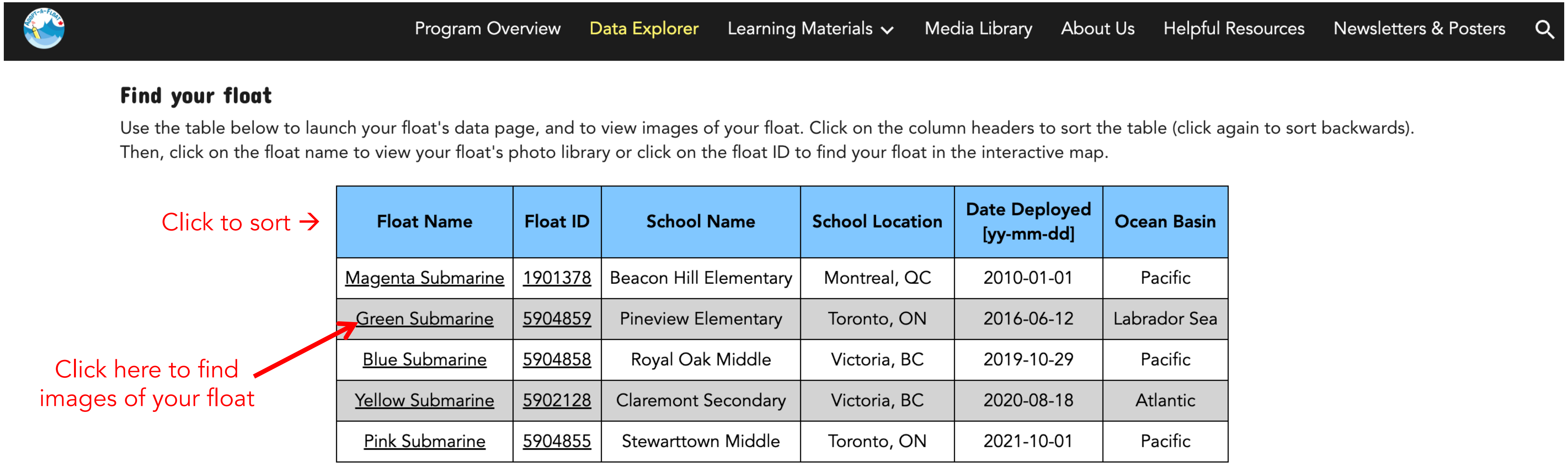
Step 1. Navigate to the Data Explorer page

Go to adopt-a-float.ocean.dal.ca and click on the Data Explorer tab.


Adopt-a-Float Canada
adopt-a-float.ocean.dal.ca
Program Overview
Data Explorer
Learning Materials
Media Library
About Us
Helpful Resources
Newsletters & Posters
Adopt-a-Float Canada
A cost-free, grade school program that allows classes to explore the ocean by tracking the progress of their own robotic float

Step 2. Find your float in the sortable float table

Click on the table headers to sort the table. After you have located your float, click on the float name to find images of your float.



Find your float

Use the table below to launch your float's data page, and to view images of your float. Click on the column headers to sort the table (click again to sort backwards). Then, click on the float name to view your float's photo library or click on the float ID to find your float in the interactive map.

Float Name	Float ID	School Name	School Location	Date Deployed [yy-mm-dd]	Ocean Basin
Magenta Submarine	1901378	Beacon Hill Elementary	Montreal, QC	2010-01-01	Pacific
Green Submarine	5904859	Pineview Elementary	Toronto, ON	2016-06-12	Labrador Sea
Blue Submarine	5904858	Royal Oak Middle	Victoria, BC	2019-10-29	Pacific
Yellow Submarine	5902128	Claremont Secondary	Victoria, BC	2020-08-18	Atlantic
Pink Submarine	5904855	Stewarttown Middle	Toronto, ON	2021-10-01	Pacific

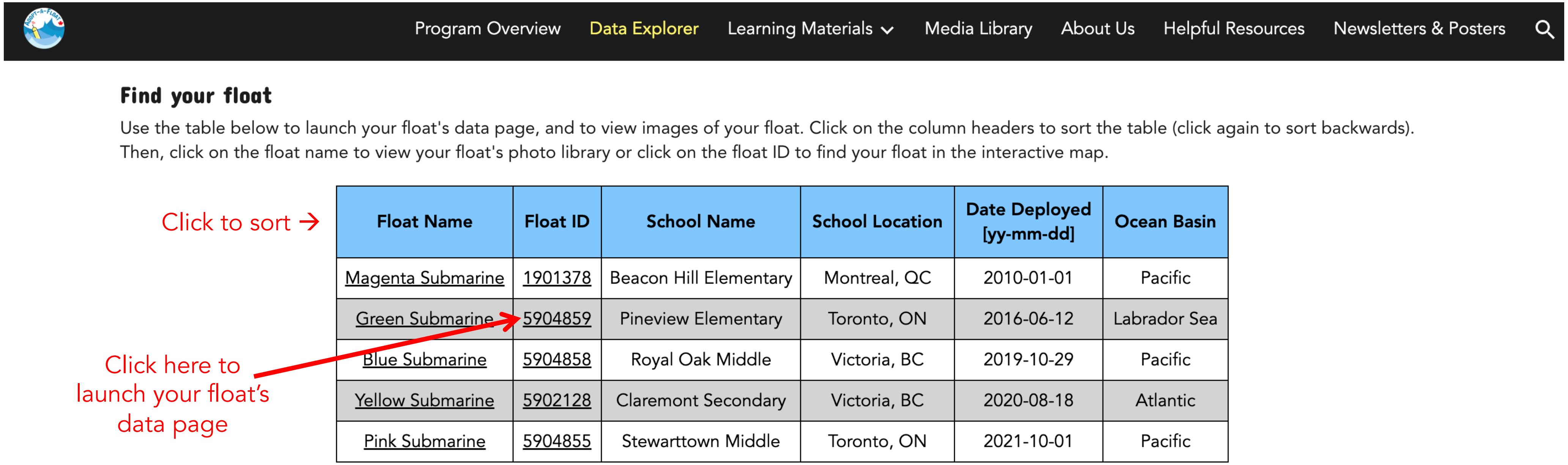
Click to sort →

Click here to find images of your float

Note: the information in the table in this tutorial is for example purposes only.

Step 3. Launch your float's data page

Click on the float ID number to launch the float's data page on the EuroArgo data selection / fleet monitoring dashboard.



Find your float

Use the table below to launch your float's data page, and to view images of your float. Click on the column headers to sort the table (click again to sort backwards). Then, click on the float name to view your float's photo library or click on the float ID to find your float in the interactive map.

Click to sort →

Float Name	Float ID	School Name	School Location	Date Deployed [yy-mm-dd]	Ocean Basin
Magenta Submarine	1901378	Beacon Hill Elementary	Montreal, QC	2010-01-01	Pacific
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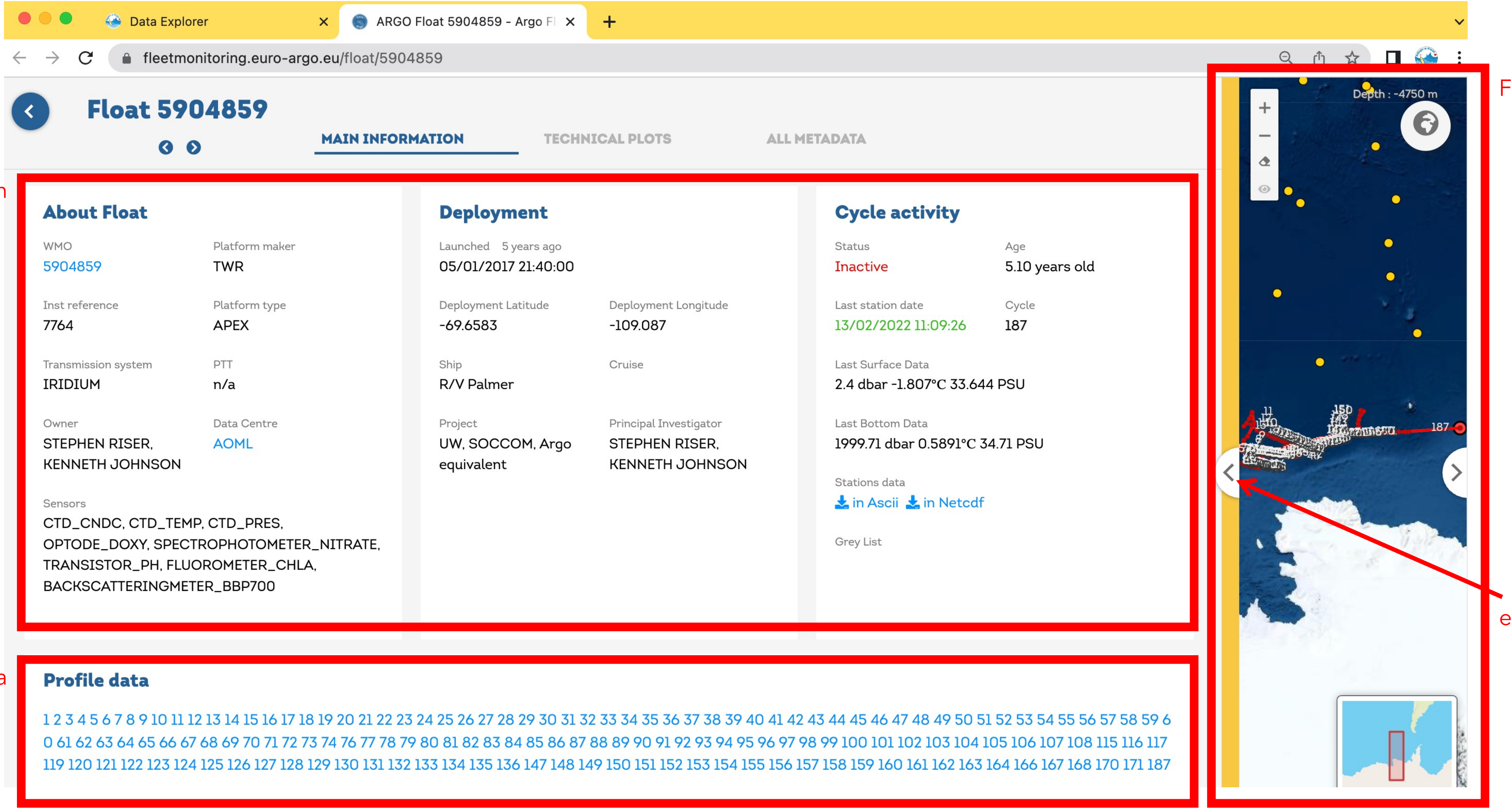
Pink Submarine	5904855	Stewarttown Middle	Toronto, ON	2021-10-01	Pacific

Click here to launch your float's data page

Note: the information in the table in this tutorial is for example purposes only.

The data page contains the float's information, a map of its location and trajectory, and links to the float data.



fleetmonitoring.euro-argo.eu/float/5904859

Float 5904859

Float information

About Float

WMO
5904859

Platform maker
TWR

Inst reference
7764

Platform type
APEX

Transmission system
IRIDIUM

PTT
n/a

Owner
STEPHEN RISER, KENNETH JOHNSON

Data Centre
AOML

Sensors
CTD_CNDC, CTD_TEMP, CTD_PRES, OPTODE_DOXY, SPECTROPHOTOMETER_NITRATE, TRANSISTOR_PH, FLUOROMETER_CHLA, BACKSCATTERINGMETER_BBP700

Deployment

Launched 5 years ago
05/01/2017 21:40:00

Deployment Latitude
-69.6583

Deployment Longitude
-109.087

Ship
R/V Palmer

Cruise

Project
UW, SOCCOM, Argo equivalent

Principal Investigator
STEPHEN RISER, KENNETH JOHNSON

Cycle activity

Status
Inactive

Age
5.10 years old

Last station date
13/02/2022 11:09:26

Cycle
187

Last Surface Data
2.4 dbar -1.807°C 33.644 PSU

Last Bottom Data
1999.71 dbar 0.5891°C 34.71 PSU

Stations data
in Ascii in Netcdf

Grey List

Float data

Profile data

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 6
0 61 62 63 64 65 66 67 68 69 70 71 72 73 74 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 115 116 117
119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 166 167 168 170 171 187

Float map

Click to expand the map

Wait, what is a float's ID number?!

Before we move on, let's take a moment to go over what your float's ID number is…

The ID number, sometimes referred to as the **WMO number**, is a unique set of digits that identify your float. Every Argo float has an ID number that is assigned when the float is manufactured. No two floats have the same number. Knowing a float's ID number will help to identify a float in data tables and on the different interactive float maps and data dashboards.

Data table

Float Name	Float ID	School Name	School Location	Date Deployed [yy-mm-dd]	Ocean Basin
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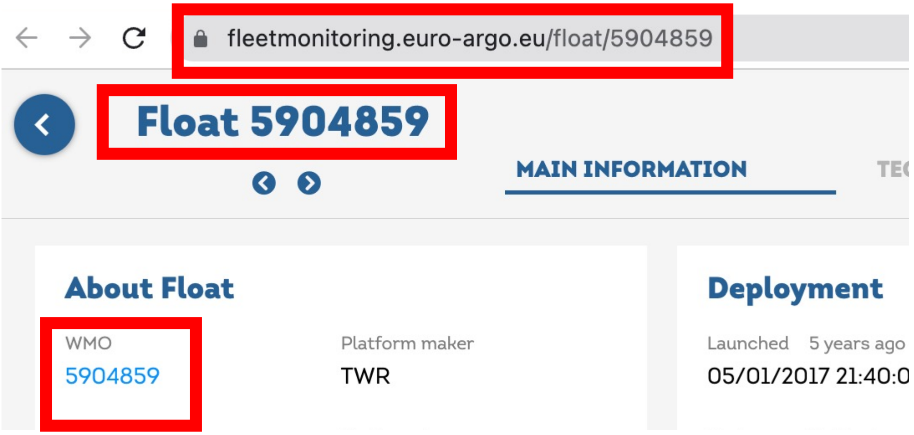
Pink Submarine	5904855	Stewarttown Middle	Toronto, ON	2021-10-01	Pacific

Data page



fleetmonitoring.euro-argo.eu/float/5904859

Float 5904859

About Float

WMO
5904859

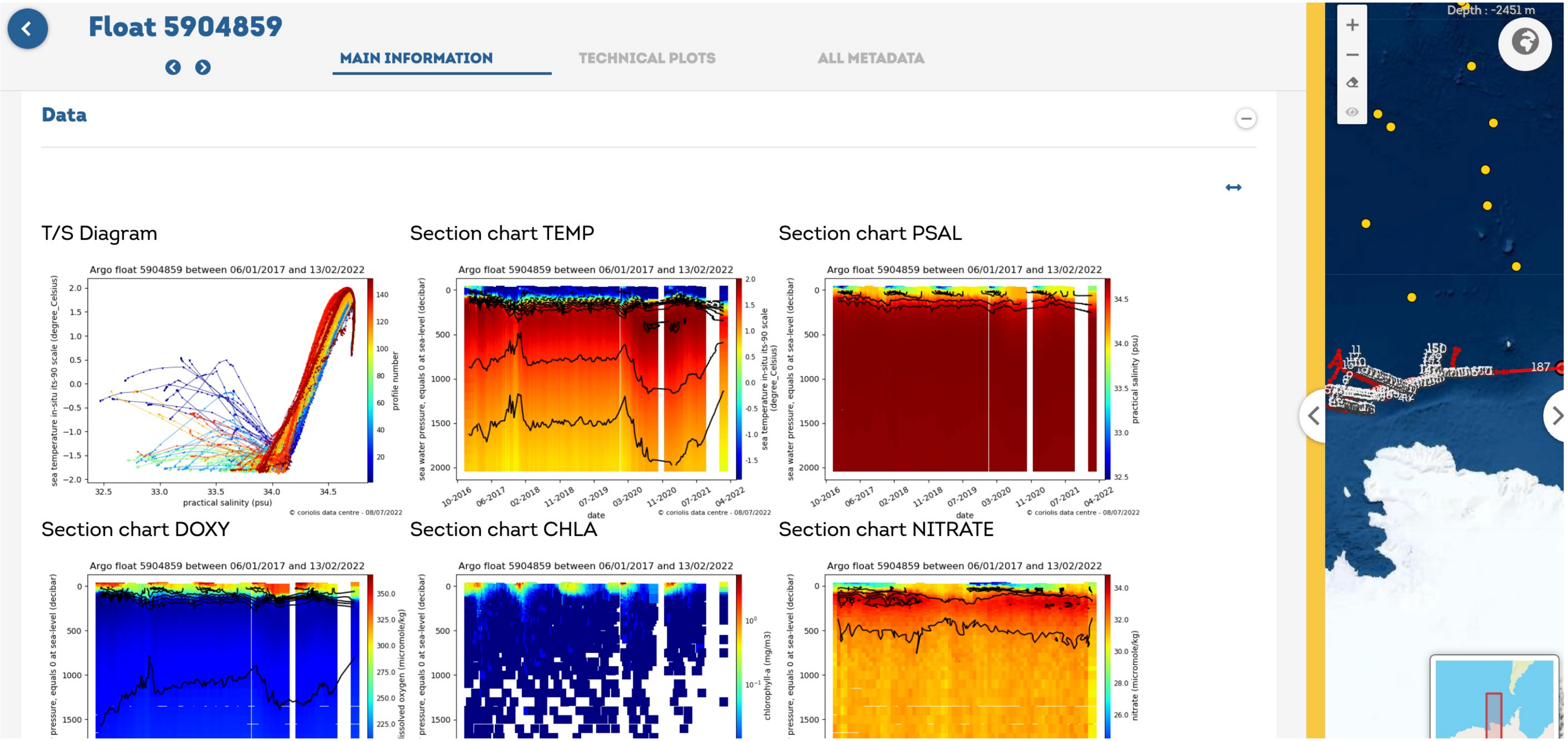
Platform maker
TWR

Deployment

Launched 5 years ago
05/01/2017 21:40:0

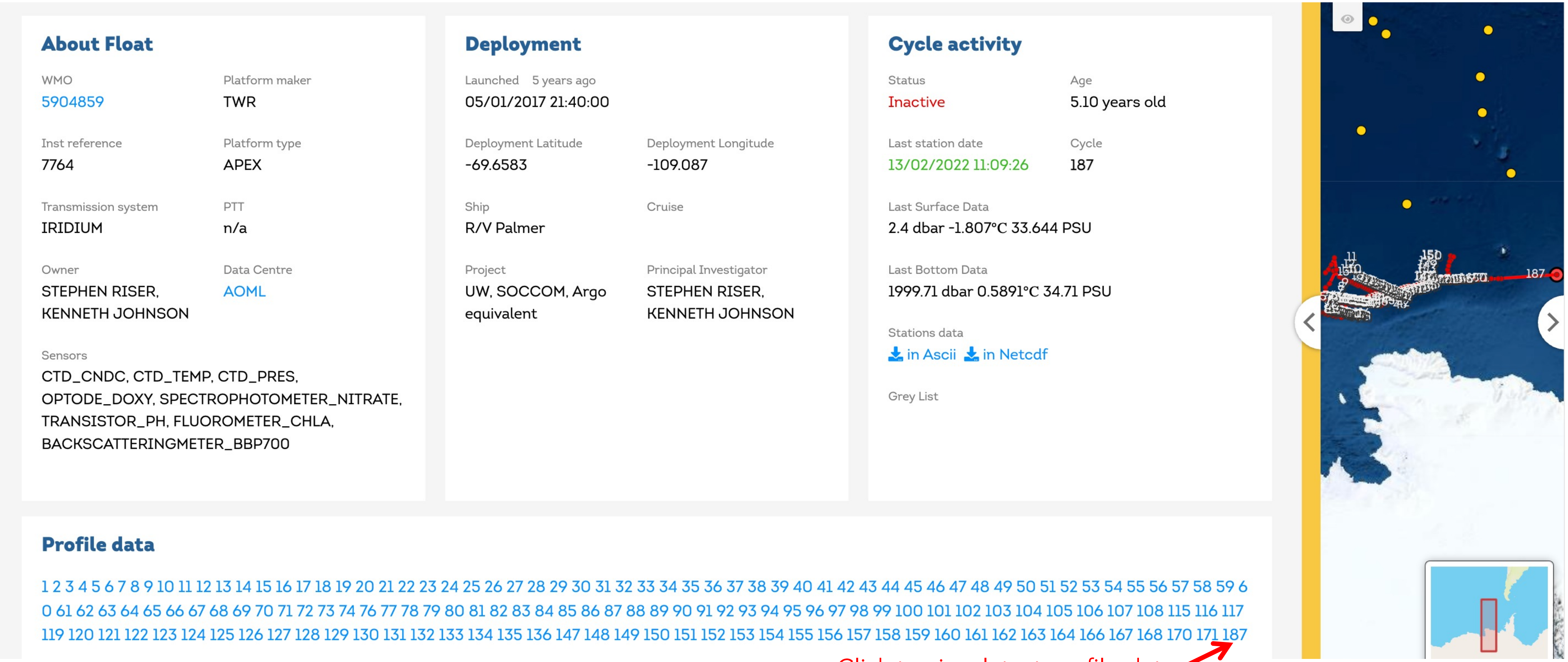
Step 4. View quick-view float data figures

Scroll down on the float's data page to view different figures (data images) of your float's data. Click on an image to make it larger.


Float 5904859
MAIN INFORMATION
TECHNICAL PLOTS
ALL METADATA
Data
T/S Diagram
Section chart TEMP
Section chart PSAL
Section chart DOXY
Section chart CHLA
Section chart NITRATE
Argo float 5904859 between 06/01/2017 and 13/02/2022
© coriolis data centre - 08/07/2022
Depth : -2451 m

Step 5. View and download data from one profile

Click on a profile number to load that profile's data. The highest number is the *most recent* profile.



About Float

WMO
5904859

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TWR

Inst reference
7764

Platform type
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Transmission system
IRIDIUM

PTT
n/a

Owner
STEPHEN RISER, KENNETH JOHNSON

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05/01/2017 21:40:00

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UW, SOCCOM, Argo equivalent

Principal Investigator
STEPHEN RISER, KENNETH JOHNSON

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13/02/2022 11:09:26

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1999.71 dbar 0.5891°C 34.71 PSU

Stations data
in Ascii in Netcdf

Grey List

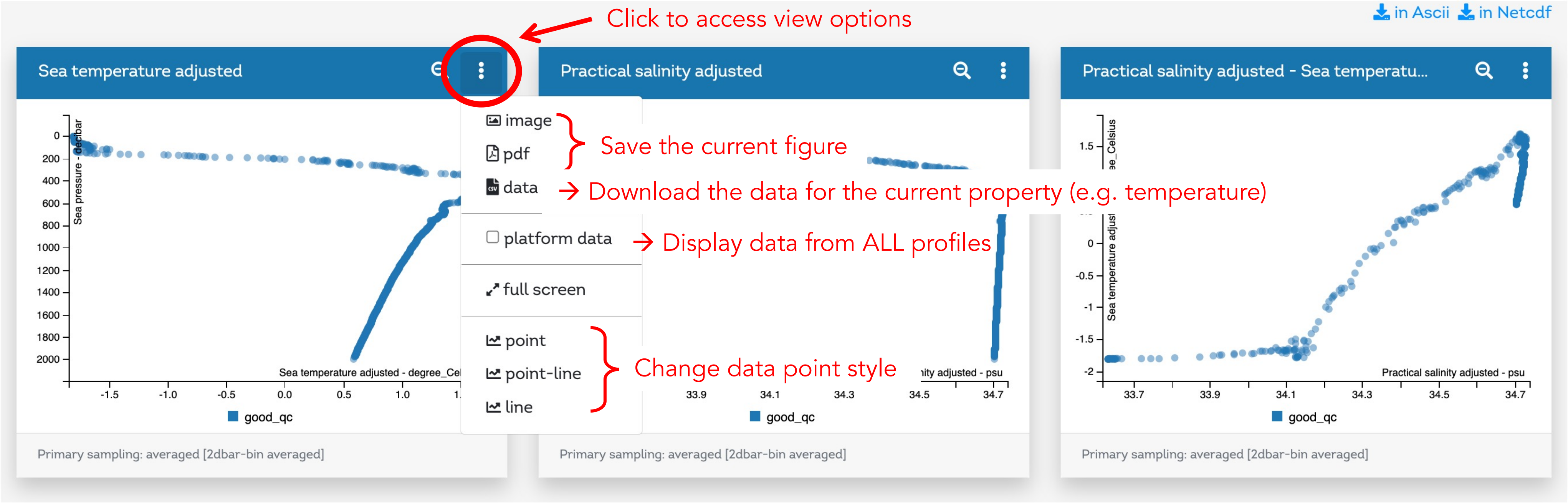
Profile data

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 115 116 117 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 166 167 168 170 171 187

Click to view latest profile data

Step 5 (continued).
View and download data from one profile

Change view options, save the figure or download the selected property data by clicking on the three dots in the upper-right of each figure panel.


in Ascii
in Netcdf
Sea temperature adjusted
Practical salinity adjusted
Practical salinity adjusted - Sea temperatu...
image
pdf
data
☐ platform data
full screen
point
point-line
line
Sea pressure - decibar
0
200
400
600
800
1000
1200
1400
1600
1800
2000
Sea temperature adjusted - degree_Cel
-1.5
-1.0
-0.5
0.0
0.5
1.0
good_qc
ity adjusted - psu
33.9
34.1
34.3
34.5
34.7
good_qc
Sea temperature adjusted - degree_Celsius
1.5
0
-0.5
-1
-1.5
-2
Practical salinity adjusted - psu
33.7
33.9
34.1
34.3
34.5
34.7
good_qc
Primary sampling: averaged [2dbar-bin averaged]
Primary sampling: averaged [2dbar-bin averaged]
Primary sampling: averaged [2dbar-bin averaged]

Click to access view options

Save the current figure

→ Download the data for the current property (e.g. temperature)

→ Display data from ALL profiles

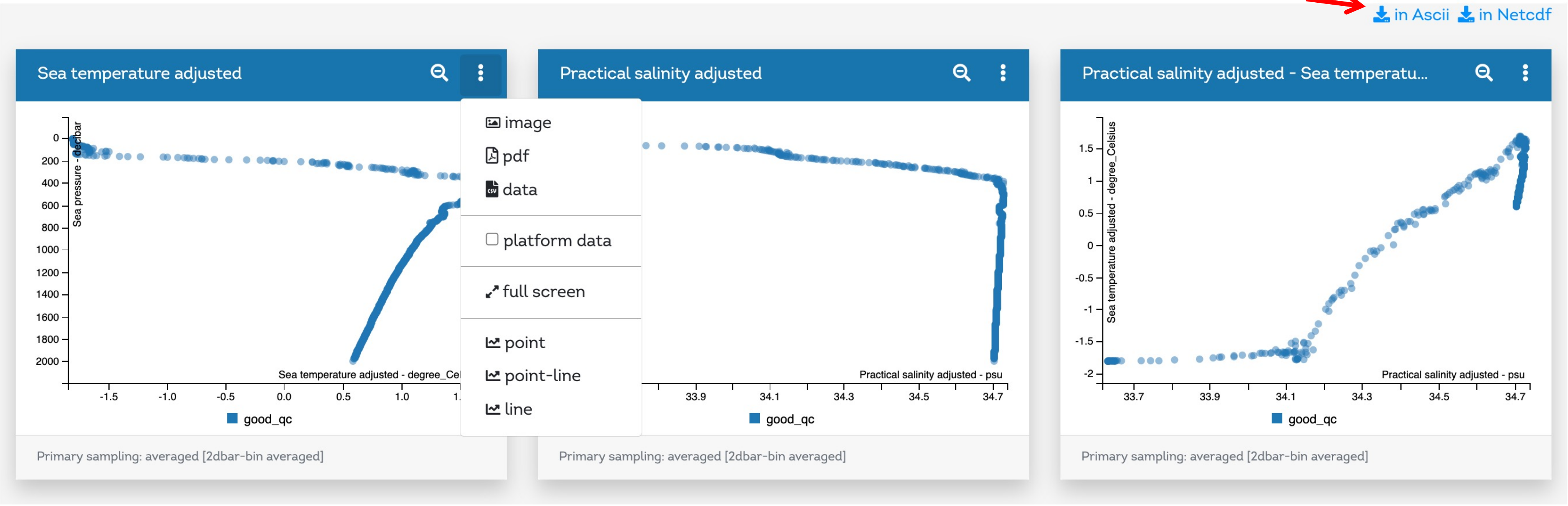
Change data point style

Step 5 (continued).
View and download data from one profile

Download all the data from the current profile number by clicking the “in Ascii” or “in Netcdf” buttons. You will be required to enter your email address. Check your inbox for the data download link from noreply@ifremer.fr - it may take several minutes or hours for the data to arrive.

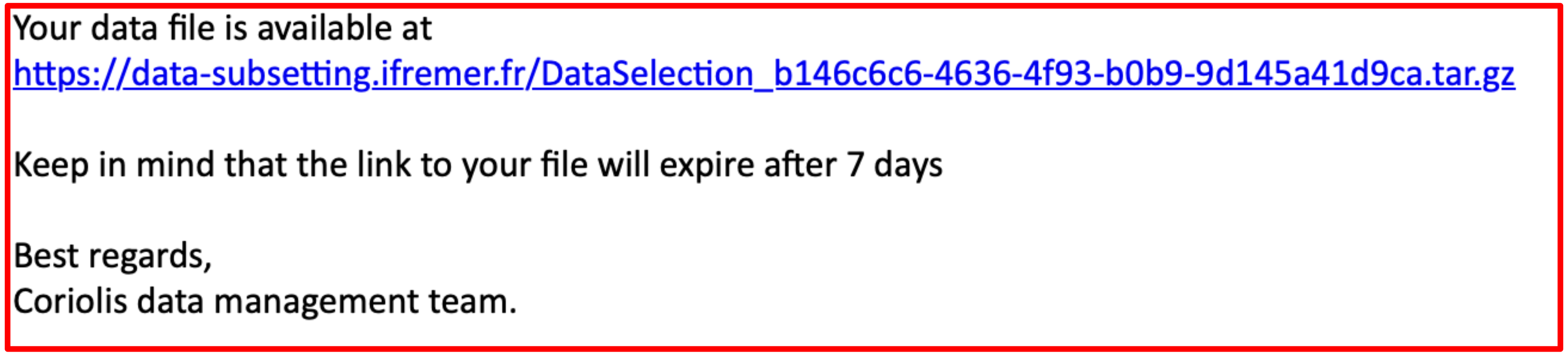
Note: you will be able to open the Ascii data in a program like Microsoft Excel or Google Sheets. A different software, like Python, R or Matlab, will be required to open the NetCDF files.

Click to download all data from current profile


in Ascii
in Netcdf
Sea temperature adjusted
image
pdf
data
☐ platform data
full screen
point
point-line
line
Sea pressure - decibar
0
200
400
600
800
1000
1200
1400
1600
1800
2000
Sea temperature adjusted - degree_Cel
-1.5
-1.0
-0.5
0.0
0.5
1.0
good_qc
Primary sampling: averaged [2dbar-bin averaged]
Practical salinity adjusted
Practical salinity adjusted - psu
33.9
34.1
34.3
34.5
34.7
good_qc
Primary sampling: averaged [2dbar-bin averaged]
Practical salinity adjusted - Sea temperatu...
Sea temperature adjusted - degree_Celsius
1.5
1
0.5
0
-0.5
-1
-1.5
-2
Practical salinity adjusted - psu
33.7
33.9
34.1
34.3
34.5
34.7
good_qc
Primary sampling: averaged [2dbar-bin averaged]

Step 5 (continued).
View and download data from one profile

The data will arrive in your inbox in a message that looks like this:



Your data file is available at
https://data-subsetting.ifremer.fr/DataSelection_b146c6c6-4636-4f93-b0b9-9d145a41d9ca.tar.gz

Keep in mind that the link to your file will expire after 7 days

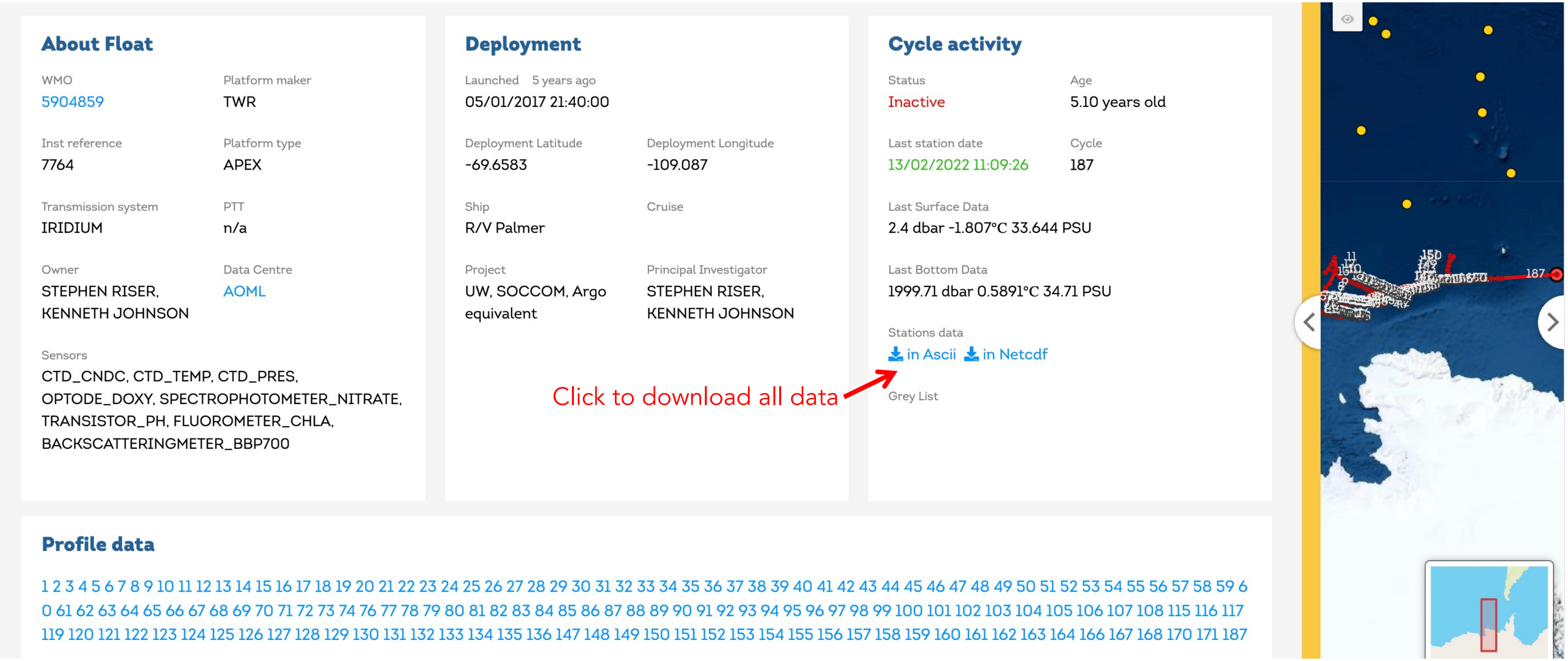
Best regards,
Coriolis data management team.

Note that the data contained in the corresponding file are for one profile only.

Note as well that the URL above is an example only – the data you access will have a different link.

Step 6.
View and download data from ALL of your float's profiles

To download all the float's data, return the the float's main data page. Click on the "in Ascii" or "in Netcdf". Again, you will be asked to enter your email address. The data will arrive in your inbox.



About Float

WMO
5904859

Platform maker
TWR

Inst reference
7764

Platform type
APEX

Transmission system
IRIDIUM

PTT
n/a

Owner
STEPHEN RISER, KENNETH JOHNSON

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Deployment

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05/01/2017 21:40:00

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Ship
R/V Palmer

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UW, SOCCOM, Argo equivalent

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5.10 years old

Last station date
13/02/2022 11:09:26

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Last Surface Data
2.4 dbar -1.807°C 33.644 PSU

Last Bottom Data
1999.71 dbar 0.5891°C 34.71 PSU

Stations data
in Ascii in Netcdf

Grey List

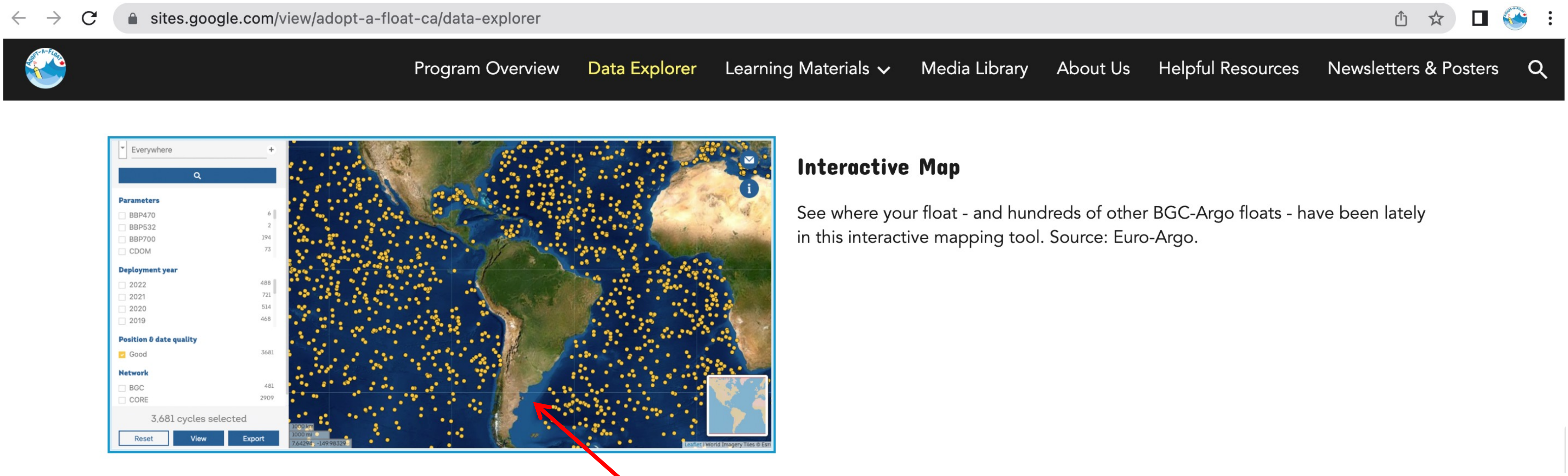
Click to download all data

Profile data

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 115 116 117 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 166 167 168 170 171 187

Step 7. View and download data from multiple floats

In some cases, you may wish to download data from multiple floats. To do that, navigate back to the Data Explorer page on the Adopt-a-Float website and launch the interactive map.


sites.google.com/view/adopt-a-float-ca/data-explorer
Program Overview
Data Explorer
Learning Materials
Media Library
About Us
Helpful Resources
Newsletters & Posters
Everywhere
Reset
View
Export
1000 km
1000 mi
Leaflet | World Imagery Tiles © Esri

Parameters
☐ BBP470 6
☐ BBP532 2
☐ BBP700 194
☐ CDOM 73

Deployment year
☐ 2022 488
☐ 2021 721
☐ 2020 514
☐ 2019 468

Position & date quality
☑ Good 3681

Network
☐ BGC 481
☐ CORE 2909

3,681 cycles selected

Interactive Map

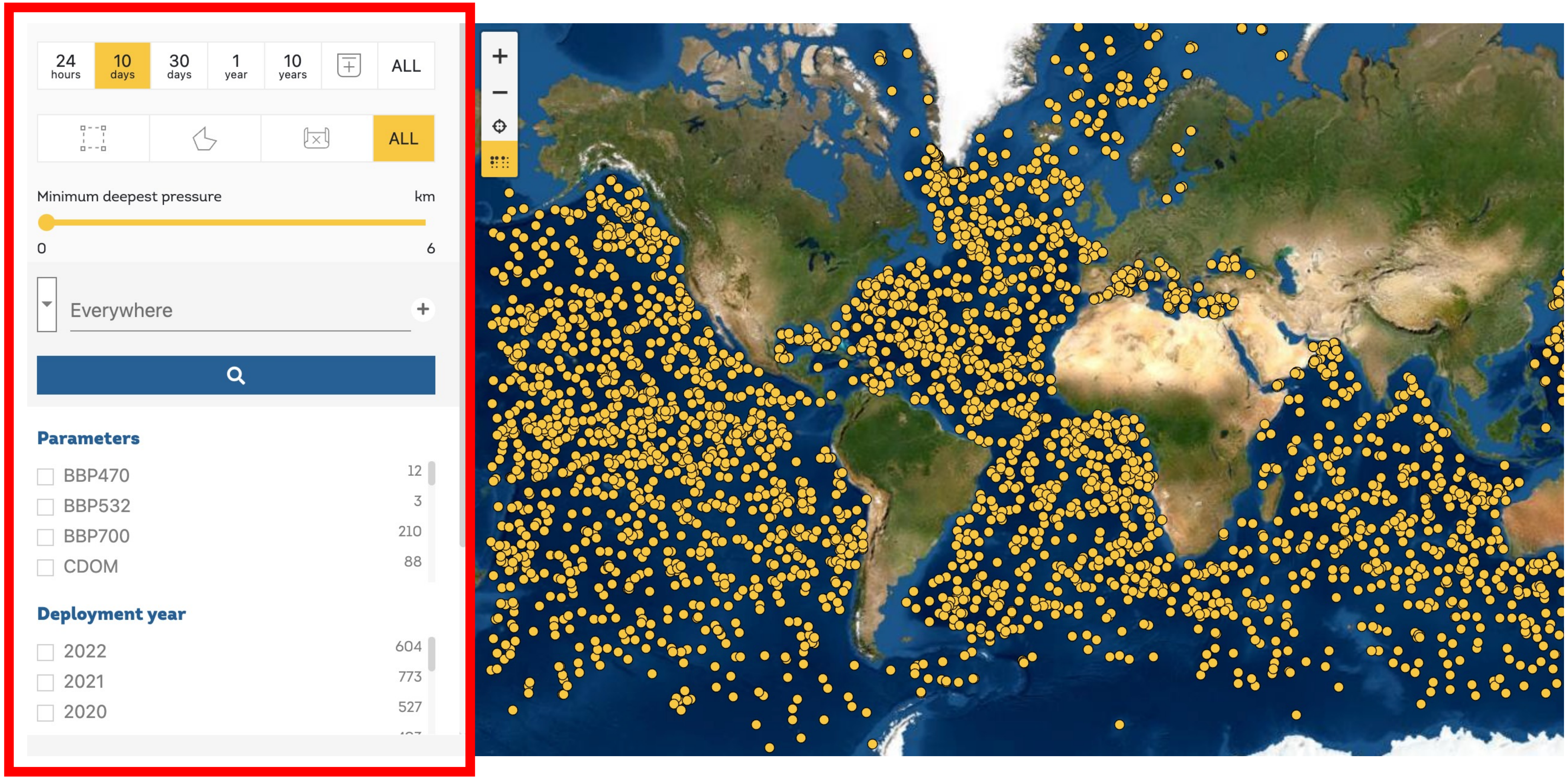
See where your float - and hundreds of other BGC-Argo floats - have been lately in this interactive mapping tool. Source: Euro-Argo.

Click on the image to launch the map (https://dataselection.euro-argo.eu/)

Step 7 (continued).
View and download data from multiple floats

Narrow your data search by using the selection tools at the left.

Selection tools


24 hours
10 days
30 days
1 year
10 years
ALL
ALL
Everywhere

Minimum deepest pressure km

0 6

Parameters

☐ BBP470	12
☐ BBP532	3
☐ BBP700	210
☐ CDOM	88

Deployment year

☐ 2022	604
☐ 2021	773
☐ 2020	527

Step 7 (continued).
View and download data from multiple floats

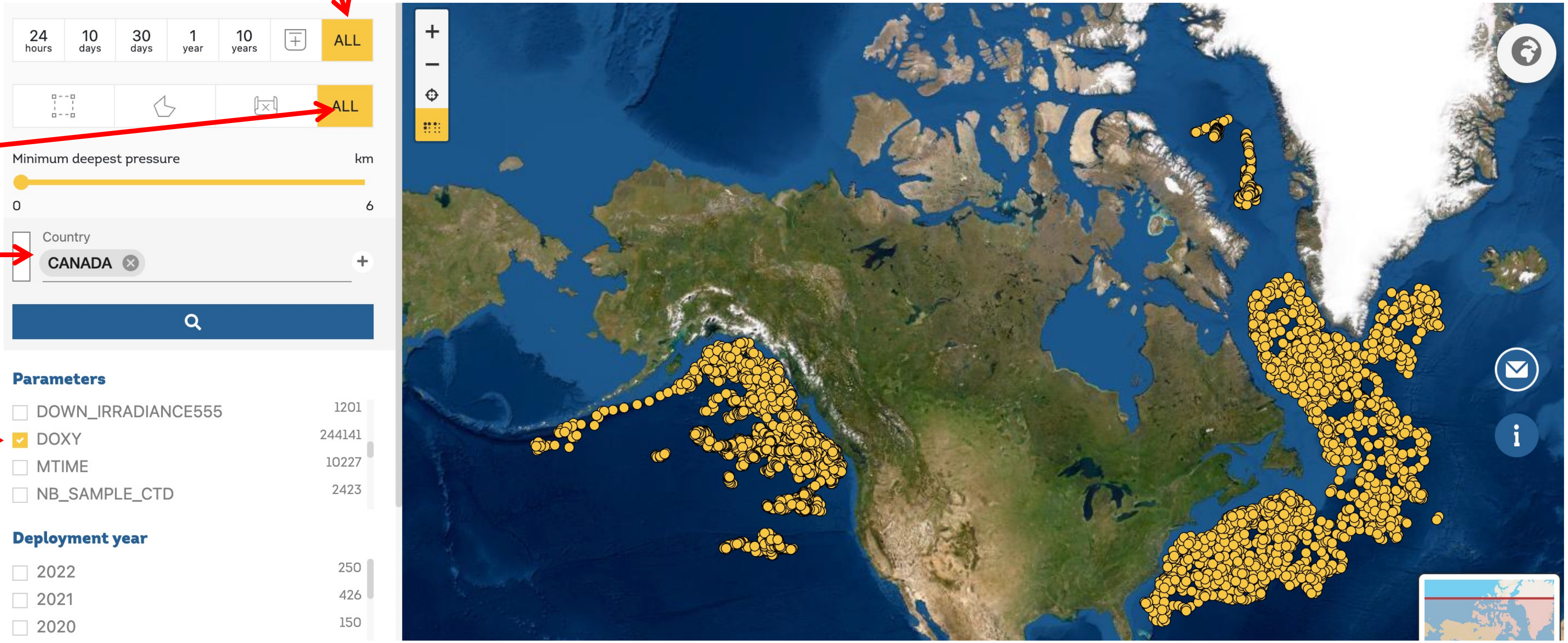
For example, you may wish to search for all oxygen profiles collected by Canadian floats.

Profiles from all time (i.e., collected since the beginning of the Argo program)

Profiles collected in all locations

Canadian-owned floats

Floats that measure oxygen



Minimum deepest pressure km

0 6

Country

CANADA

Parameters

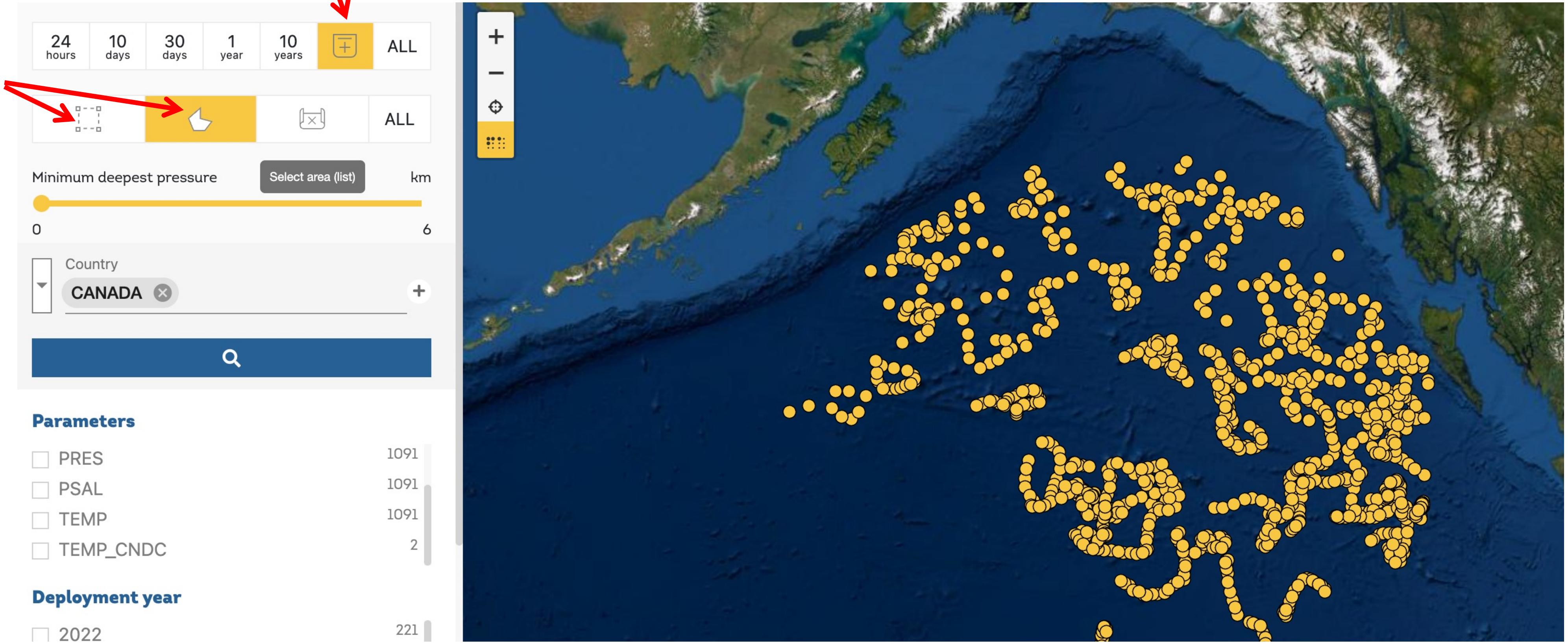
☐ DOWN_IRRADIANCE555	1201
☑ DOXY	244141
☐ MTIME	10227
☐ NB_SAMPLE_CTD	2423

Deployment year

☐ 2022	250
☐ 2021	426
☐ 2020	150

Step 7 (continued).
View and download data from multiple floats

Or, you may wish to download data from a specific region, during a specific time.


24 hours
10 days
30 days
1 year
10 years
ALL
ALL
Select area (list)
+
−

Specify date range

Select a geographic area using a rectangle or polygon

Minimum deepest pressure km

0 6

Country: CANADA

Parameters

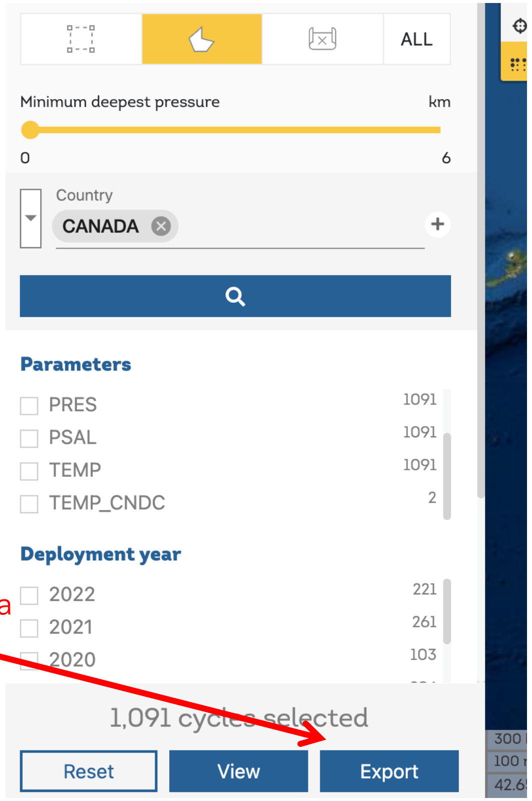
☐ PRES	1091
☐ PSAL	1091
☐ TEMP	1091
☐ TEMP_CNDC	2

Deployment year

☐ 2022	221

Step 7 (continued).
View and download data from multiple floats

When you are happy with your selection, click ‘Export’ at the bottom of the screen. From there, choose your export options. Select “Delayed mode” and “good” data quality code to download the high-quality data only. You may select one or more parameters to download. Enter your email and keep an eye on your inbox.


ALL
Reset
View
Export

Minimum deepest pressure km
0 6

Country
CANADA

Parameters

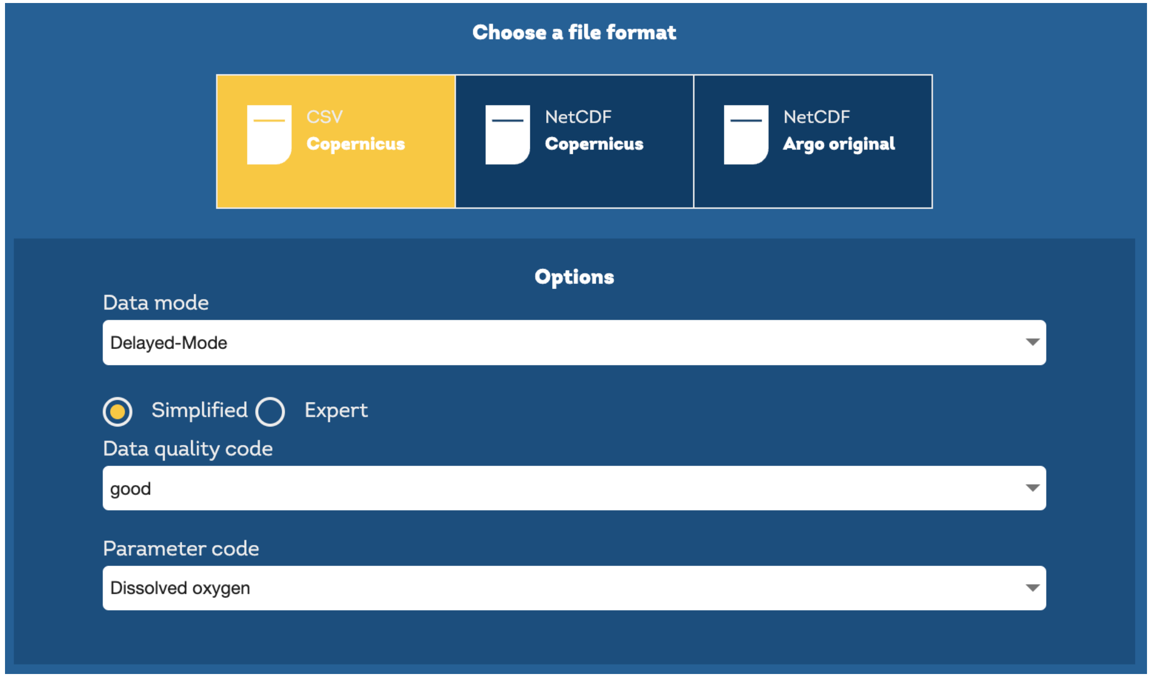
☐ PRES	1091
☐ PSAL	1091
☐ TEMP	1091
☐ TEMP_CNDC	2

Deployment year

☐ 2022	221
☐ 2021	261
☐ 2020	103

1,091 cycles selected

Download selected data


Choose a file format
CSV Copernicus
NetCDF Copernicus
NetCDF Argo original
Options

Data mode: Delayed-Mode

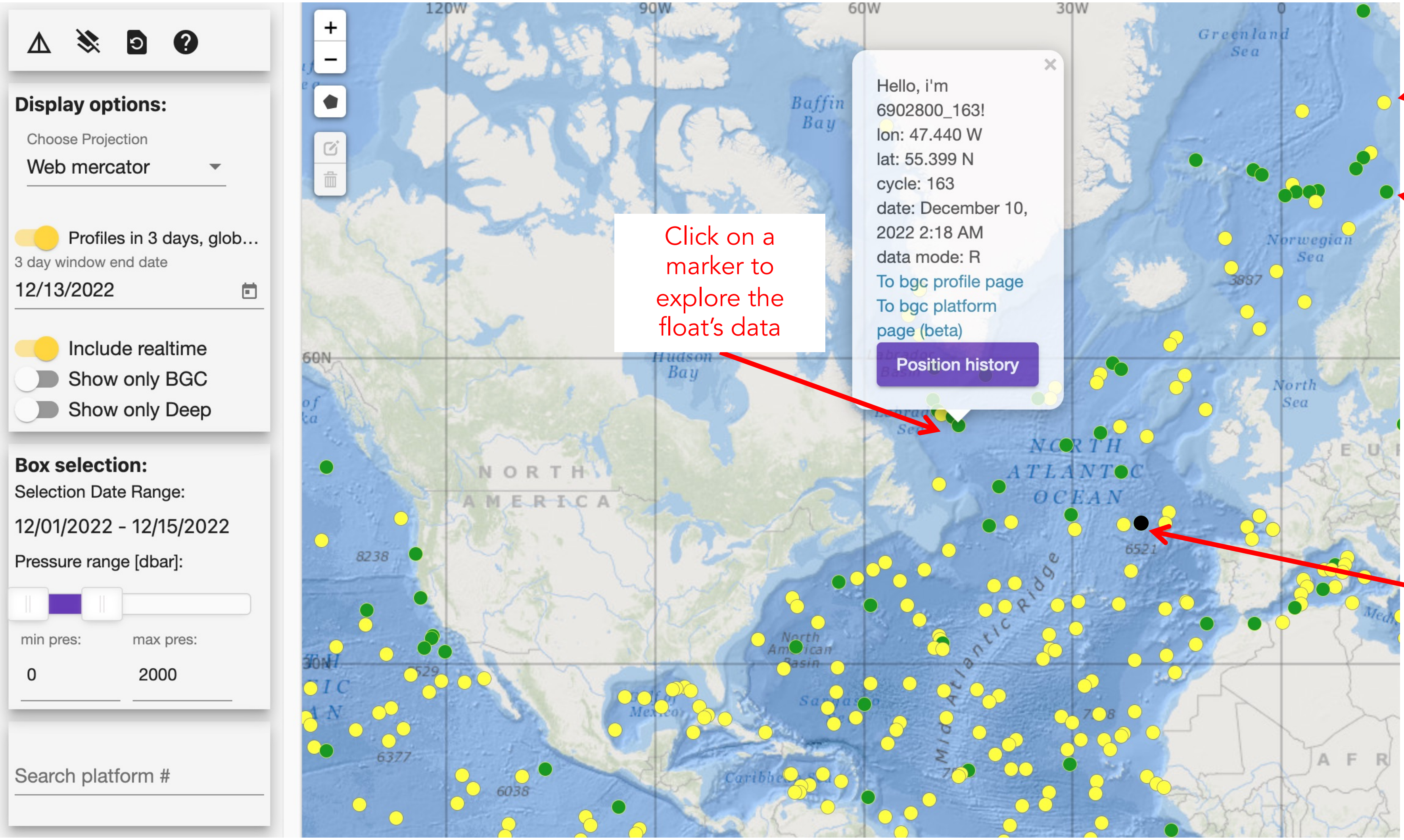
● Simplified ○ Expert

Data quality code: good

Parameter code: Dissolved oxygen

Check out our data analysis tutorials for information on how to begin analyzing the data that you have downloaded.

Explore the Argovis dashboard as an alternative to the mapping and data visualization tools provided by the Euro-Argo data selection interface.



Display options:

Choose Projection: Web mercator

Profiles in 3 days, glob…

3 day window end date: 12/13/2022

Include realtime

Show only BGC

Show only Deep

Box selection:

Selection Date Range:

12/01/2022 - 12/15/2022

Pressure range [dbar]:

min pres: 0

max pres: 2000

Search platform #

Hello, i'm
6902800_163!
lon: 47.440 W
lat: 55.399 N
cycle: 163
date: December 10, 2022 2:18 AM
data mode: R
To bgc profile page
To bgc platform page (beta)

Position history
120W
90W
60W
30W
0
60N
30N
Baffin Bay
Hudson Bay
Greenland Sea
Norwegian Sea
North Sea
Labrador Sea
NORTH AMERICA
NORTH ATLANTIC OCEAN
North American Basin
Sargasso
Mid Atlantic Ridge
Gulf of Mexico
Caribbean
EU
AFR
Med
8238
6377
6038
6521
3887

Click on a marker to explore the float's data

Yellow markers = Core-Argo floats

Green markers = BGC-Argo floats

Black markers = deep-Argo floats

Search for your float by ID #

From here, you can search for and view data from specific floats, by adjusting the search settings on the left side of the screen.