



**OCEAN
TRACKING NETWORK**

DATA WORKFLOW

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OTN Data Workflow

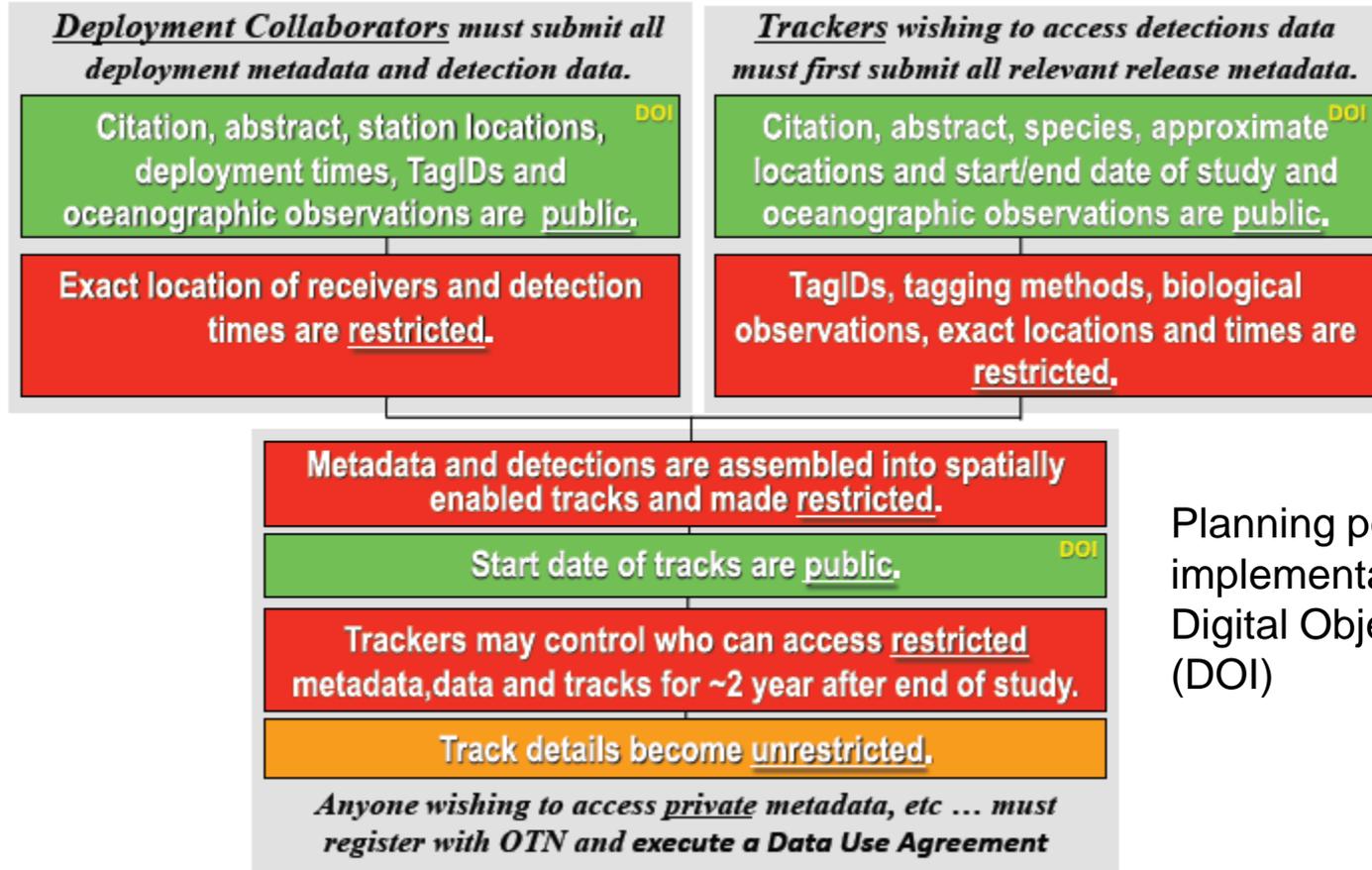
Ocean Tracking Network, Data Management (OTN DM) has been reviewing and interpreting CFI approved, OTN Data Policy and Risk Mitigation/Work Flow documentation to ensure implementation of a viable OTN Data Workflow that is within these policies.

The OTN system data flow presented here is simply illustrated by way of a series of schematic diagrams, annotated computer screen captures and step by step instructions. Examples include: spreadsheet templates for capture of collection metadata, PLONE project folders for by collaborator and by mission organization of data and metadata files, PostgreSQL database schemas and tables for integrating data and metadata, GoogleEarth maps for visualizing the database contents and comma separated (CSV) outputs files data extractions from the database. End users are encouraged to experiment and ask questions.

To date, the primary visualization focus has been on receiver data, tagging data products are currently under development.

Data Submission and Access

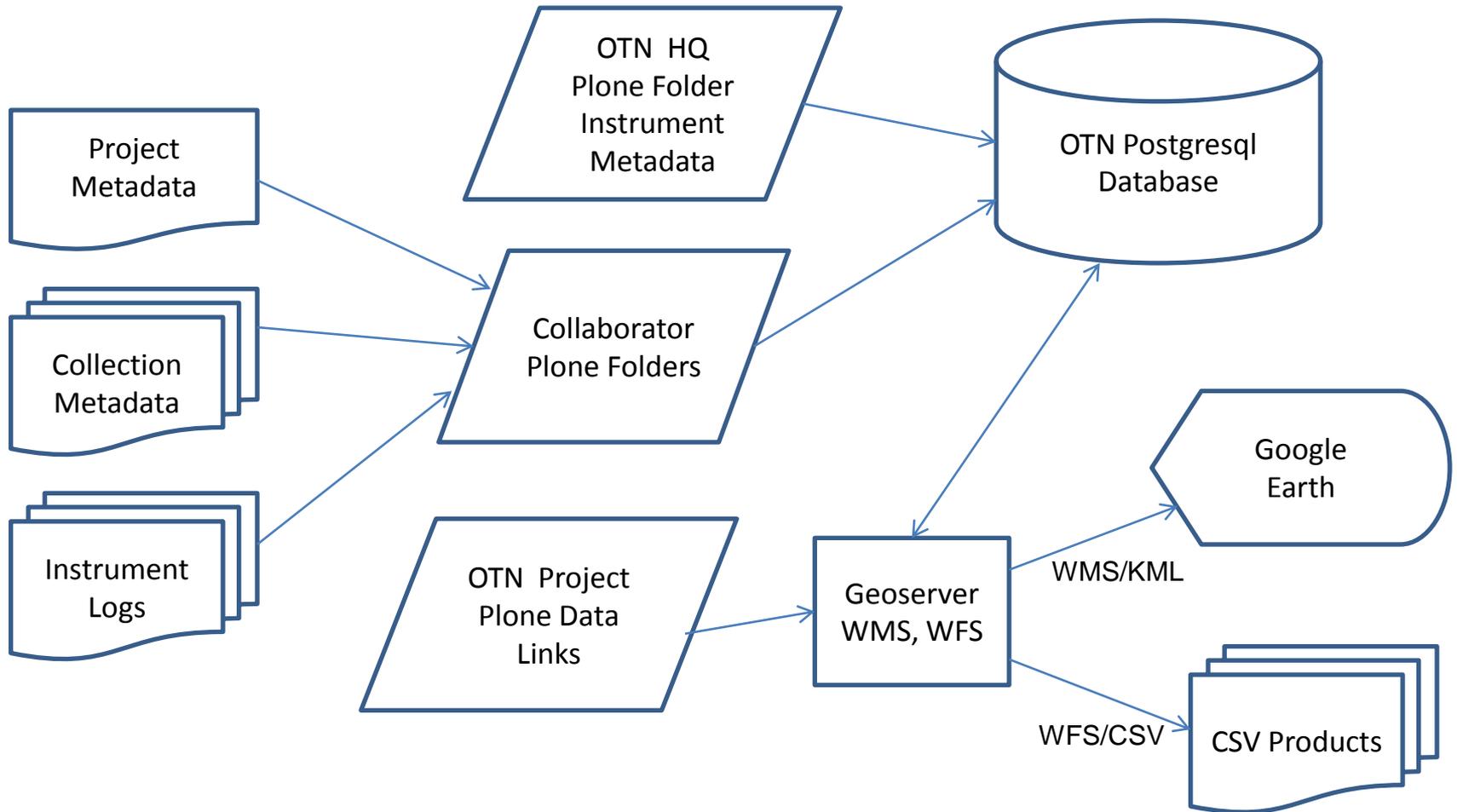
OTN DM implementation of CFI approved, OTN Data Policy



Planning possible implementation of Digital Object Identifier (DOI)

OTN Data Workflow Diagram

OTN DM implementation of CFI approved Workflow



<http://www.marinebiodiversity.ca/OTN/data/data-collection/Risk%20Mitigation%20Nov13-1.doc/view>

Ocean Tracking Network Portal

Members Site: <http://www.marinebiodiversity.ca/OTN>



The screenshot shows the Ocean Tracking Network Portal members site. At the top right, there are links for [Site Map](#), [Accessibility](#), and [Contact](#). The main header features the Dalhousie University logo with the tagline "Inspiring Minds" and the text "Ocean Tracking Network". To the right of the header is the "OCEAN TRACKING NETWORK" logo. Below the header is a navigation menu with buttons for [Home](#), [Data](#), and [News](#). A "Log in" link is located in the top right corner of the page. Below the navigation menu, the breadcrumb trail reads "You are here: Home". The main content area displays the message "You are now logged out" and "You can log in again below." Below this message is a login form with the following fields and buttons:

Please log in

Login Name

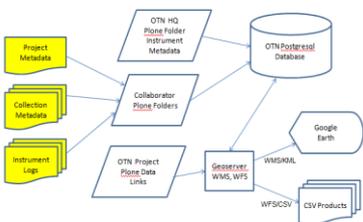
Password

Forgot your password?
If you have forgotten your password, [we can send you a new one.](#)

Access to OTN Data Sheets, OTN Regional and Project Metadata,
OTN Collaborator Metadata and Data Repository, OTN videos, and more...

OTN Metadata and Field Sheets

<http://www.marinebiodiversity.ca/OTN/data/data-collection/data-sheet-templates>



You are here: Home → Data → Data Policy, Templates and Workflows → OTN Data Sheet Templates

OTN Data Sheet Templates

by [Susan Dufault\(mqr\)](#) — last modified May 19, 2010 09:32 AM

Excel files of data sheet templates and pdfs of data sheets for printing. NOTE: If you previously downloaded one of these templates, you may need to clear your browser cache in order to download the most recent version because your browser stores copies of previous downloads. The most recent version of each data sheet is listed in the OTN Data Sheet Catalogue.

[OTN Collaborator Discovery Metadata collection form](#) — by [Susan Dufault\(mqr\)](#) — last modified Jun 21, 2010 09:53 AM

[Proposed Station Locations](#) — by [Susan Dufault\(mqr\)](#) — last modified Oct 07, 2010 12:05 PM

Data sheet used to compile data on latitude, longitude, and bottom depth for proposed station locations on new OTN arrays.

[Proposed Station Locations pdf for printing](#) — by [Susan Dufault\(mqr\)](#) — last modified Oct 07, 2010 12:05 PM

[OTN Mission Report](#) — by [Susan Dufault](#) — last modified Apr 22, 2010 11:21 AM

Used to collect general information, objectives, and summary of an OTN Mission

[OTN Mission Report pdf for printing](#) — by [Susan Dufault](#) — last modified Apr 22, 2010 11:24 AM

[OTN Receiver Deployment Field Sheet](#) — by [Susan Dufault\(mqr\)](#) — last modified Jun 10, 2010 12:50 PM

Field sheet designed to assist in the collection of metadata during receiver deployments.

[OTN Receiver Deployment Field Sheet pdf for printing](#) — by [Susan Dufault\(mqr\)](#) — last modified Jun 10, 2010 12:51 PM

[OTN Receiver Metadata](#) — by [Susan Dufault](#) — last modified Aug 30, 2010 11:42 AM

The otn-metadata-receiver.xls Excel file is for the collection of receiver deployment, recovery, and download metadata. The three sheets of the Excel file cover the deployment, download, and recovery metadata for multiple stations on one OTN Array. The data is collected during the mission date, after each deployment, download, or recovery mission. The data is collected in the OTN Receiver Metadata Sheet. Please submit all data electronically via email to the OTN Data Center at otnd@marlab.ca. The data should be saved and forwarded to the appropriate data management facility, even if it contains other important technical data.

[OTN Receiver Field Log Sheet](#) — by [Susan Dufault](#) — last modified Jul 23, 2010 11:56 AM

The OTN Receiver Field Log Sheet is a summary log sheet that covers the deployment, successful recovery and associated comments represent the completion of the log sheet denoted by the consecutive deployment number. The log sheet is populated with deployment information is entered in the logsheet, it can be printed to take into the field.

[OTN Tag Release Metadata Collection Data Sheet](#) — by [Susan Dufault\(mqr\)](#) — last modified May 19, 2010 09:32 AM

Excel file of OTN Tag Release Metadata Collection Data Sheet template

[OTN Sentinel Tag Log Sheet](#) — by [Susan Dufault\(mqr\)](#) — last modified Jun 10, 2010 12:52 PM

Used to collect metadata on sentinel tag deployments.

[OTN Sentinel Tag Log Sheet pdf for printing](#) — by [Susan Dufault\(mqr\)](#) — last modified Jun 10, 2010 12:52 PM

OTN Data Sheets

Collection/Loading of OTN metadata

Station Locations

Mission Reports

Receivers Deployments, Recoveries, Downloads

(including all associated sensors)

Tagging (animals, sentinel)

Field Sheets

Printable field sheets to assist with tracking information while in the field and/or prefilled with field needed information (e.g. `ar_interrogate_code`).

Receiver Metadata for Additional Sensors

Currently modifying receiver metadata, data dictionary and associated instructions to include use for additional sensors (e.g. ADCP, Microcat, Minilog-T, etc).

	OTN_ARRAY	STATION_NO	CONSECUTIVE_DEPLOY_NO	INTEND_LAT	INTEND_LONG	OTN_MISSION_ID (vvvvvyyyymmddhh)	DEPLOY_DATE_TIME (yyyy-mm-ddThh:mm:ss)	DEPLOY_LAT	DEPLOY_LONG	BOTTOM_DEPTH			
1													
2	HFX	ADCP001	1			HUDSON2008041501	2008-04-15T01:51:00	44.35190	-63.30470	100			
3	HFX	ADCP001	1			HUDSON2008041501	2008-04-15T01:51:00	44.35190	-63.30470	100			
4	HFX	ADCP002	1			HUDSON2008041501	2008-04-15T13:54:00	44.19980	-63.13500	172			
5	HFX	ADCP002	1			HUDSON2008041501	2008-04-15T13:54:00	44.19980	-63.13500	172			
6	HFX	ADCP002	2			HUDSON2008050820	2008-05-08T21:30:00	44.24940	-63.16670	168			
7	HFX	ADCP002	2										
						BOTTOM_DEPTH	RISER_LEN_GTH	RECEIVER_DEPTH	CHECK_COM_PLETE_TIME	STATUS_IN (OK?)	RCV_MODEL_NO	RCV_SERIAL_NO	SYNC_DATE_
8	HFX	ADCP003	1			1							
9	HFX	ADCP003	1			2		97			Microcat SBE 37-SM V2.6	5342	
10	HFX	ADCP001	2			3		88			ADCP RD Instruments	10487	
11	HFX	ADCP001	2			4		169			Microcat SBE 37-SM V2.6b	5343	
12	HFX	ADCP002	3			5		158			ADCP RD Instruments	10572	
13	HFX	ADCP002	3			6		164			Microcat SBE 37-SM V2.6b	5343	
14	HFX	ADCP003	2			7		156			ADCP RD Instruments	10572	
15	HFX	ADCP003	2			8		165			Microcat SBE 37-SM V2.6b	5341	
						9		157			ADCP RD Instruments	10220	
						10		100			Microcat SBE 37-SM V2.6	5342	
						11		91			ADCP RD Instruments	10487	
						12		165			Microcat SBE 37-SM V2.6b	5343	
						13		156			ADCP RD Instruments	10572	
						14		168			Microcat SBE 37-SM V2.6b	5341	
						15		159			ADCP RD Instruments	10220	
						16							

Where more than one instrument (e.g. Acoustic receiver/release with benthic bod containing temperature, salinity and depth sensors): Deployment worksheet, enter a row for each instrument with the same station_no and consecutive_deploy_no.

Receiver Metadata for Additional Sensors

	OTN_ARRAY	STATION_NO	CONSECUTIVE_DEPLOY_NO	OTN_MISSION_ID (vvvvvyyyymmddhh)	AR_CONFIRM (y/n)	DATA_DOWN LOADED (y/n)	RECOVERED (y/n)	RECOVER_DATE_TIME (yyyy-mm-ddThh:mm:ss)
1								
2	HFX	ADCP002	1	HUDSON2008050820		n	y	2008-05-08T20:00:00
3	HFX	ADCP001	1	HUDSON2008100519		y	y	2008-10-07T16:02:00
4	HFX	ADCP002	2	HUDSON2008100519		y	y	2008-10-07T17:25:00
5	HFX	ADCO003	1	HUDSON2008100519		y	y	2008-10-08T11:23:00
6	HFX	ADCP001	2	HUDSON2009041011		y	y	2009-04-20T11:10:00
7	HFX	ADCP002	3	HUDSON2009041011		y	y	2009-04-20T11:50:00
8	HFX	ADCO003	2	HUDSON2009041011		y	y	2009-04-20T12:00:00

	OTN_ARRAY	STATION_NO	CONSECUTIVE_DEPLOY_NO	OTN_MISSION_ID (vvvvvyyyymmddhh)	DOWNLOAD_DATE_TIME (yyyy-mm-ddThh:mm:ss)	RCV_MOD EL_NO	RCV_SERIAL_NO	DOWNL(STAT (OK:	FILENAME
1									
2	HFX	ADCP001	1	HUDSON2008100519	2008-10-07T16:04:00	Microcat	S5342		1674A.asc
3	HFX	ADCP001	1	HUDSON2008100519	2008-10-07T15:52:00	ADCP RD I	10487		M1674000.000
4	HFX	ADCP002	2	HUDSON2008100519	2008-10-07T17:25:00	Microcat	S5343		1675A.asc
5	HFX	ADCP002	2	HUDSON2008100519	2008-10-08T10:20:00	ADCP RD I	10572		M1675000.LOG, M1675001.000
6	HFX	ADCP003	1	HUDSON2008100519	2008-10-08T11:23:00	Microcat	S5341		1676A.asc
7	HFX	ADCP003	1	HUDSON2008100519	2008-10-07T17:41:00	ADCP RD I	10220		M1676001.000, M1676000.LOG

Where more than one instrument (e.g. Acoustic receiver/release with benthic bod containing temperature, salinity and depth sensors): Recovery worksheet, enter a single row for each station_no and consecutive_deploy_no. Download worksheet, enter a row for each instrument with the same station_no and consecutive_deploy_no.

Data Capture Guidelines

Field Preparations

1. get in-work/active paper Metadata Field Sheets from previous activity on array (upload/recovery) and new blank sheets (deploy or re-deploy)
2. get paper copy of mission report and enter the following fields:
 1. OTN_mission_id
 2. host_mission_id (if available)
 3. vessel_name
 4. chief_scientist
 5. data_collection_personnel
 6. other_personnel
 7. destination
 8. mission_objectives

Field Operations

1. as each individual field activity is being conducted
 1. complete appropriate fields on metadata field sheet(s)
2. after last field activity is completed
 1. transcribe data from field sheets to appropriate spreadsheet files
 2. save spreadsheet files to hard drive and to USB memory stick as otn_array_yyyy_mm_dd_metadata_receiver. (e.g. otn_hfx_2008_10_15_metadata_receiver).
3. after field trip is completed
 1. create trip subfolder in array/metadata_and_data folder on OTN Portal named trip_yyyy_mm_dd
 2. upload mission report
 3. upload spreadsheet files to new subfolder
 4. prepare scanned images of metadata field sheets and upload to new subfolder
 5. send email to OTN Data Centre, otndc@Dal.Ca with link to new subfolder
 6. retain file of original field sheets

Instrument Data Download Guidelines

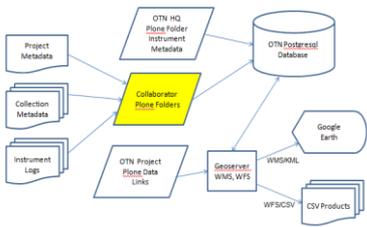
Refer to VUE Product operating Manual, along with the following points:

Field Operations

1. after each individual instrument upload is completed
 1. write name of instrument log file(s) and other details of data capture on metadata field sheet(s)
 2. compress and save instrument log file(s) to local .ZIP file
2. after last instrument is uploaded
 1. copy .ZIP file to at least one USB memory stick
 2. remove the memory stick from the computer
3. after field trip is completed
 1. load instrument log file(s) to a local subarray VUE database
 2. export processed files(s) from VUE database, compress and save to local .ZIP file
 3. upload both raw instrument log file(s) and processed exported VUE file(s) .ZIP files containing to the designated section of the OTN portal
 4. send email to OTN Data Centre (otndc@Dal.Ca), informing them about newly collected data

Tip: Always keep at least two copies of log files and VUE database on separate computing devices (i.e. laptop computer and USB memory stick) and send incremental copies to OTN portal ASAP.

Collaborator Plone Folders



DALHOUSIE UNIVERSITY *Inspiring Minds* Ocean Tracking Network

OCEAN TRACKING NETWORK

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Search Site only in current section

Home About OTN Policies Meetings Users Groups Data News etc

Lenore Bajona Log out

You are here: Home → Data → repository → Perth, WA, Australia - receiver deployment

Perth, WA, Australia - receiver deployment

by [Jayson Semmens](#) — last modified Nov 15, 2009 01:25 PM
— filed under: [data collection](#), [status = short list](#), [sponsor = AATAMS](#), [status = in work](#), [region = E Indian](#), [activity = receiver deployment](#), [source = secondary](#), [sponsor = OTN](#)

- [Perth Line Discovery Metadata](#) — by [Jayson Semmens](#) — last modified Mar 02, 2009 07:59 AM
Metadata is information about the data. Fill in the blanks and be generous with credit...
- [Data and Metadata](#) — by [Robert M. Branton](#) — last modified Mar 02, 2010 02:51 PM
Spreadsheets, databases, web links, etc ...
- [Status](#) — by [Robert M. Branton](#) — last modified Jan 27, 2009 09:35 PM
Brief summary from last review meeting ...
- [Image Gallery](#) — by [Robert M. Branton](#) — last modified Feb 01, 2009 09:51 AM
Maps, bathymetry profiles, instruments, etc ...
- [Local Conditions](#) — by [Robert M. Branton](#) — last modified Dec 12, 2008 04:17 PM
Local time, weather conditions, etc ...
- [Species List](#) — by [Robert M. Branton](#) — last modified Feb 25, 2009 04:52 PM
Common and scientific names with links to Google Images and World Registry of Marine Species. Add all new species here, then copy to data collection folder and remove un wanted species.
- [OTN Collaboration Agreement Schedules](#) — by [Robert M. Branton](#) — last modified Dec 12, 2008 04:19 PM
Project plan, equipment list, standard operating procedures, and policies ...
- [Deployment Review](#) — by [Duncan Bates \(mgr\)](#) — last modified Dec 12, 2008 04:21 PM
Discussions and decisions regarding this deployment
- [Mailing List](#) — by [Robert M. Branton](#) — last modified Mar 04, 2010 10:20 AM
Names and email address for people associated with this deployment
- [species list](#) — by [Robert M. Branton](#) — last modified Feb 11, 2009 11:11 PM

Navigation

- GoogleEarth...
- CSV product links
- ...
- WMS Link ...
- WFS Link ...
- short list
- long list
- data centres
- data collections
- Arctic
- E Indian
- Mediterranean
- Mid Pacific
- NE Atlantic
- NE Pacific
- NW Atlantic
- SE Atlantic
- SW Pacific
- W Indian
- Data Policy, Templates and Workflows

Only site member users with permission may access the various collaborator folders.

Collaborator Field Metadata and Data

You are here: Home → Data → repository → Perth, WA, Australia - receiver deployment → Data and Metadata

Navigation

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Data and Metadata

by [Robert M. Branton](#) — last modified Mar 02, 2010 03:51 PM

Spreadsheets, databases, web links, etc ...

Missions — by [Duncan Bates](#) — last modified May 06, 2010 09:50 AM

Contains metadata spreadsheets, mission reports, etc., grouped by mission date (yyyy_mm_dd), listed in reverse chronological order. Each Mission folder contains a Mission report unique to that mission, any log files

download including folders containing information

Contents View Edit Rules Sharing

Actions Display Add new... State: Private

Missions

by [Duncan Bates](#) — last modified May 06, 2010 09:50 AM

Contains metadata spreadsheets, mission reports, etc., grouped by mission date (yyyy_mm_dd), listed in reverse chronological order. Each Mission folder contains a Mission report unique to that mission, any log files downloaded during the mission, and metadata spreadsheets for any activities conducted during the mission, including the Receiver Metadata spreadsheet. NOTE: The Receiver Metadata file is cumulative. Individual mission folders contain a version of this file as submitted with that mission. To ensure that you have the most current information, you should always use the most recent version of the Receiver Metadata file.

Proposed Re

Perth, Au:

MS Access —

Nov, 11. C
database
a draft st:
haven't b

Web Page —

General p

WMS - getca

Can be us

WFS - getca

Working c

WFS - getfe:

Most Recent Receiver Metadata File for Perth Line — by [Susan Dufault](#) — last modified May 06, 2010 10:11 AM

This is the most recently updated version of the cumulative Receiver Metadata spreadsheet. Use this file to ensure that you have the most current information. Individual mission folders contain older versions of this file as submitted with the mission.

otn prt 2010 08 15 and otn prt 2010 09 19 — by [Nick Jarvis](#) — last modified Oct 21, 2010 05:50 AM

Stations PRT030, PRT033, and PRT036 were recovered to evaluate corrosion on 875Ts. Data downloaded in lab 2010-08-25. Stations PRT030, PRT033, and PRT036 were redeployed on 2010-09-19.

otn prt 2010 05 21 — by [Nick Jarvis](#) — last modified Sep 21, 2010 09:32 AM

Data were downloaded from the receiver at PRT034. This station was released but not recovered 2010-02-13. The receiver was found by a fisherman 800 km from Perth and returned to WA Fisheries.

otn prt 2010 02 23 — by [Nick Jarvis](#) — last modified Apr 30, 2010 03:20 PM

Stations PRT024-PRT026 were recovered and redeployed.

otn prt 2010 02 22 — by [Nick Jarvis](#) — last modified Apr 30, 2010 03:19 PM

Stations PRT27-PRT53 were deployed.

otn prt 2010 02 15 — by [Nick Jarvis](#) — last modified Apr 30, 2010 03:17 PM

Recovery attempt of station PRT034 failed. Plans to dive on stations PRT024-PRT026 aborted because of weather

Stored in folder
Data and Metadata ->
Missions

New mission metadata (mission, receiver, tag) are to be placed on collaborator plone site under a new mission folder.

Quality control is performed, revised metadata also posted on plone.

Instrument log files are also found under the mission folder.

[otn_prt_2010_08_15 and otn_prt_2010_09_19](#)

by [Nick Jarvis](#) — last modified Oct 21, 2010 05:50 AM

Stations PRT030, PRT033, and PRT036 were recovered to evaluate corrosion on 875Ts. Data downloaded in lab 2010-08-25. Stations PRT030, PRT033, and PRT036 were redeployed on 2010-09-19.

 [otn_prt_2010_08_15_mission_report.xls](#) — by [Nick Jarvis](#) — last modified Oct 21, 2010 05:42 AM

 [otn_prt_receiverlogs_2010-08-25.zip](#) — by [Rory McAuley](#) — last modified Oct 21, 2010 05:48 AM

 [otn_prt_2010_09_19_mission_report.xls](#) — by [Nick Jarvis](#) — last modified Oct 21, 2010 05:52 AM

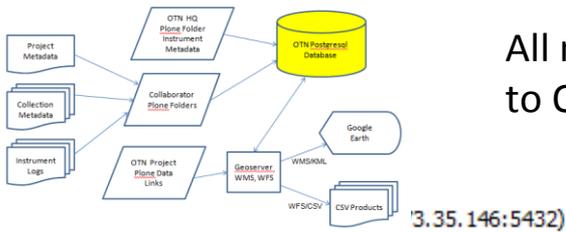
 [otn_prt_2010_09_19_receiver_metadata.xls](#) — by [Nick Jarvis](#) — last modified Oct 21, 2010 05:52 AM

 [otn_prt_2010_09_19_receiver_metadata_SDOC.xls](#) — by [Nick Jarvis](#) — last modified Oct 21, 2010 05:53 AM

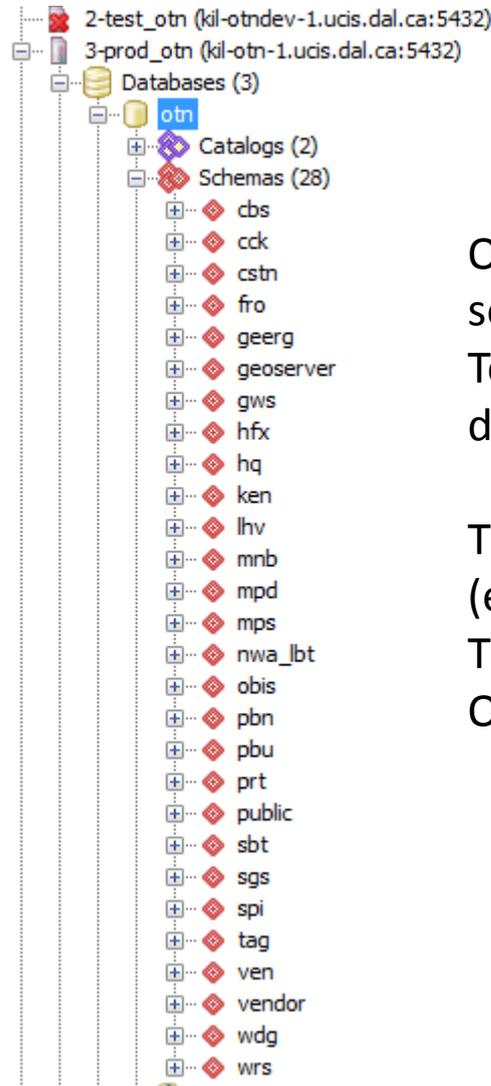
Data Manager quality controlled version of Receiver Metadata.

All metadata and instrument files are converted to CSV for loading to OTN (postgresql) database.

All metadata and instrument files are converted to CSV for loading to OTN (postgresql) database.



OTN Databases



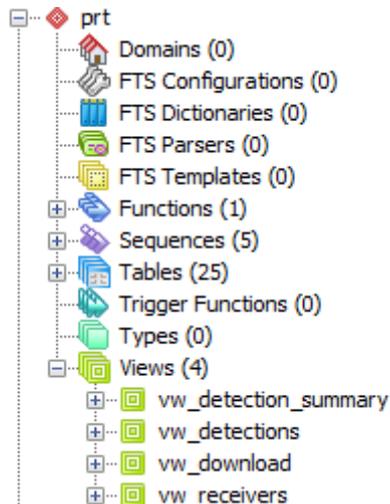
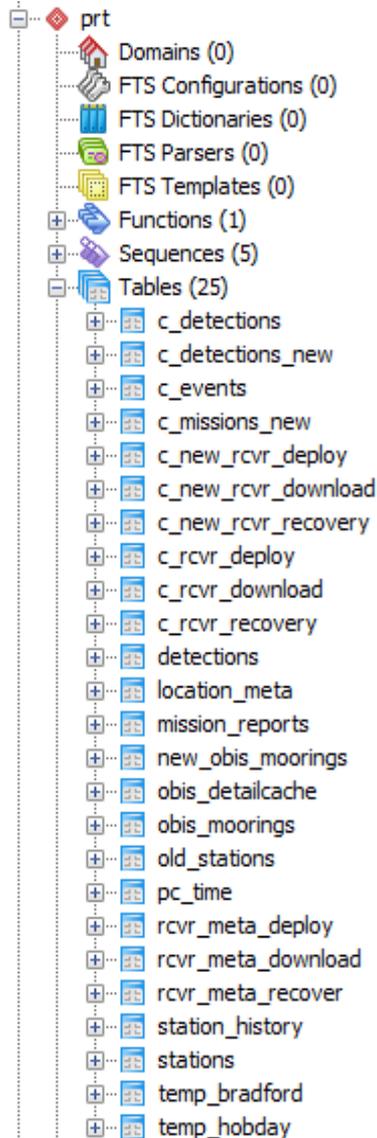
OTN maintains three environments (each contain all software/tools used by OTN Data Centre) Development, Testing and Production. Each includes OTN postgresql database. Permitting among other things data versioning.

The OTN databases contain schema for each data source (each may be one or more of: Deployment Collaborators, Tracking Collaborators, Data Collaborators), as well as OTNDC specific schemas (obis, geoserver).

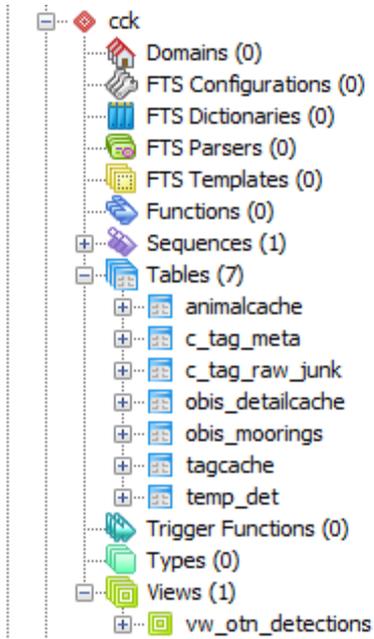
Deployment Collaborator Schema

Data is loaded as is into “raw” tables (those beginning with c_) and then processed (mostly data types) and loaded into processed tables and finally mapped to OBIS like tables (those beginning with obis_).

Views are created to link receiver metadata with downloads and detections and also detection_summary (counts).



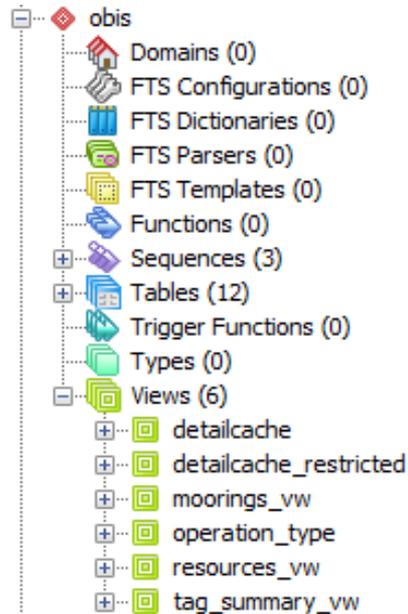
Tracking Collaborator Schema



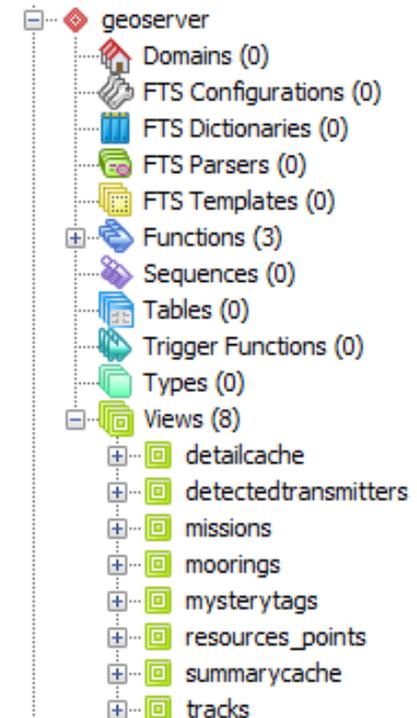
If tracking (i.e. tagging) data then a view is created comparing this tracker's tags with all detections (in obis schema). Result provided to tracking collaborator.

OBIS and Geoserver Schemas

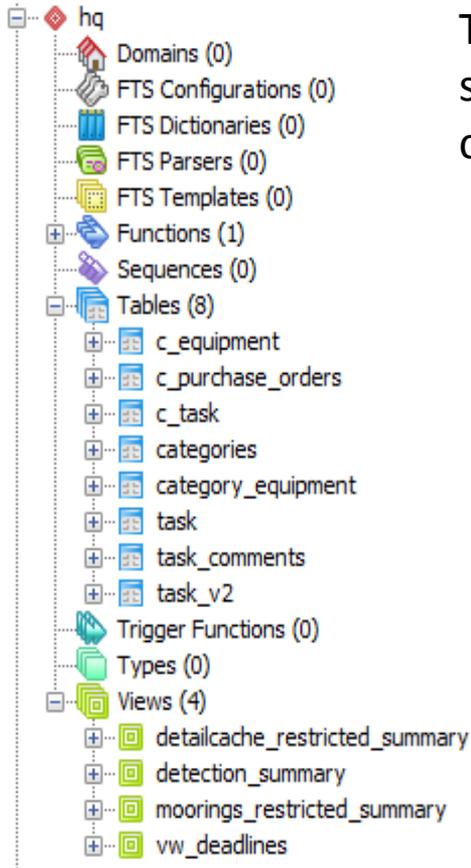
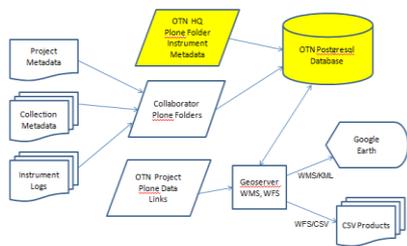
As all schemas are rolled into single schema, activities like matching receiver detections to tag metadata can be performed.



And from the rolled up schema (obis), geoserver schema views selecting from unrestricted data only, are the objects used by Geoserver to generate/query data for WMS/WFS products...Google Earth (KML), CSV.



HQ Schema

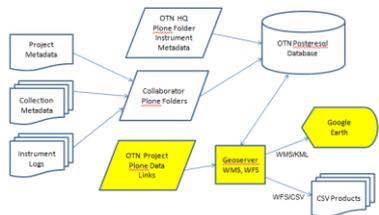


Tables for equipment inventory and collaborator status reporting. Summary views used in quality control and data updates monitoring.

detection_summary view

region	speciesname	detectedby	releasedby	animals	detects
character varying	character varying	text	text	numeric	numeric
E Indian	Carcharodon carcharias	PRT: Perth	GWS: WAFish/CSIRO	4	975
E Indian	Pagrus auratus	PRT: Perth	CCK: Cockburn Sound WA	6	614
E Indian	Thunnus maccoyii	PRT: Perth	SBT: CSIRO: SBT tagging	11	500
NW Atlantic	Dermochelys coriacea	CSTN: CSTN NW Atlantic Lea	CSTN: CSTN NW Atlantic Le	59	90637
NW Atlantic	Gadus morhua	CBS: Cabot Strait Line Phase	SPI: Shippagan, NB: Cod ta	12	3651
NW Atlantic	Halichoerus grypus	SGS: Sable Island Grey Seals	SGS: Sable Island Grey Seal	1	17270
NW Atlantic	Salmo salar	HFX: Halifax Line Phase 1	LHV: LaHave River: Salmon	1	2
NW Atlantic	Salmo salar	HFX: Halifax Line Phase 1	PBN: NOAA: Salmon tagging	16	32
NW Atlantic	Salmo salar	CBS: Cabot Strait Line Phase	MSA: MSA: Atlantic Salmon	1	776
NW Atlantic	Salmo salar	CBS: Cabot Strait Line Phase	ASF: ASF: Salmon tagging	1	2
NW Atlantic	Somniosus microcephalus	GEERG: GEERG St. Lawrence	GEERG: GEERG St. Lawrenc	9	74140
NW Atlantic	Thunnus thynnus	CBS: Cabot Strait Line Phase	TAG: Tag A Giant	5	88

OTN Project Plane Data



Site Map Accessibility Contact

Home Data News Log in

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Navigation

- GoogleEarth...
- WMS Link ...
- WFS Link ...
- NW Atlantic
- Data Policy, Templates and Workflows

Log in

Global

— filed under: [region = global](#), [status = in work](#), [sponsor = GOOS](#), [sponsor = OTN](#)

See other GOOS pilot projects...

Global Ocean Tracking Network Metadata and Data Atlas

About OTN...

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NW Atlas

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Global

— filed under: [region = global](#), [status = in work](#), [sponsor = GOOS](#), [sponsor = OTN](#)

Google Earth Network Links to OBIS schema formatted data products from OTN Geoserver including: resource metadata, station locations, detections and tracks. Click this link for direct download to local Google Earth.

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OTN Data on Google Earth

OTN Collaborators, NW Atlantic



OTN Halifax Line Receiver Metadata

Zooming in to Halifax Line, click for metadata

moorings.fid--3f5e0d34_12c035aae07_-4da9

moorings

- resource_id: 9990002
- collectioncode: HFX
- station_hist: HFX011
- station_type: deployed
- latitude: 44.42046
- longitude: -63.46852
- depth: 86.0
- notes:

instrument	deploy date	last download	recovery date	downloads
VR3-00311	2008-04-22	2009-03-17	2009-03-17	4
VR3-00311	2009-03-17	2010-01-28	-	3

Directions: [To here](#) - [From here](#)

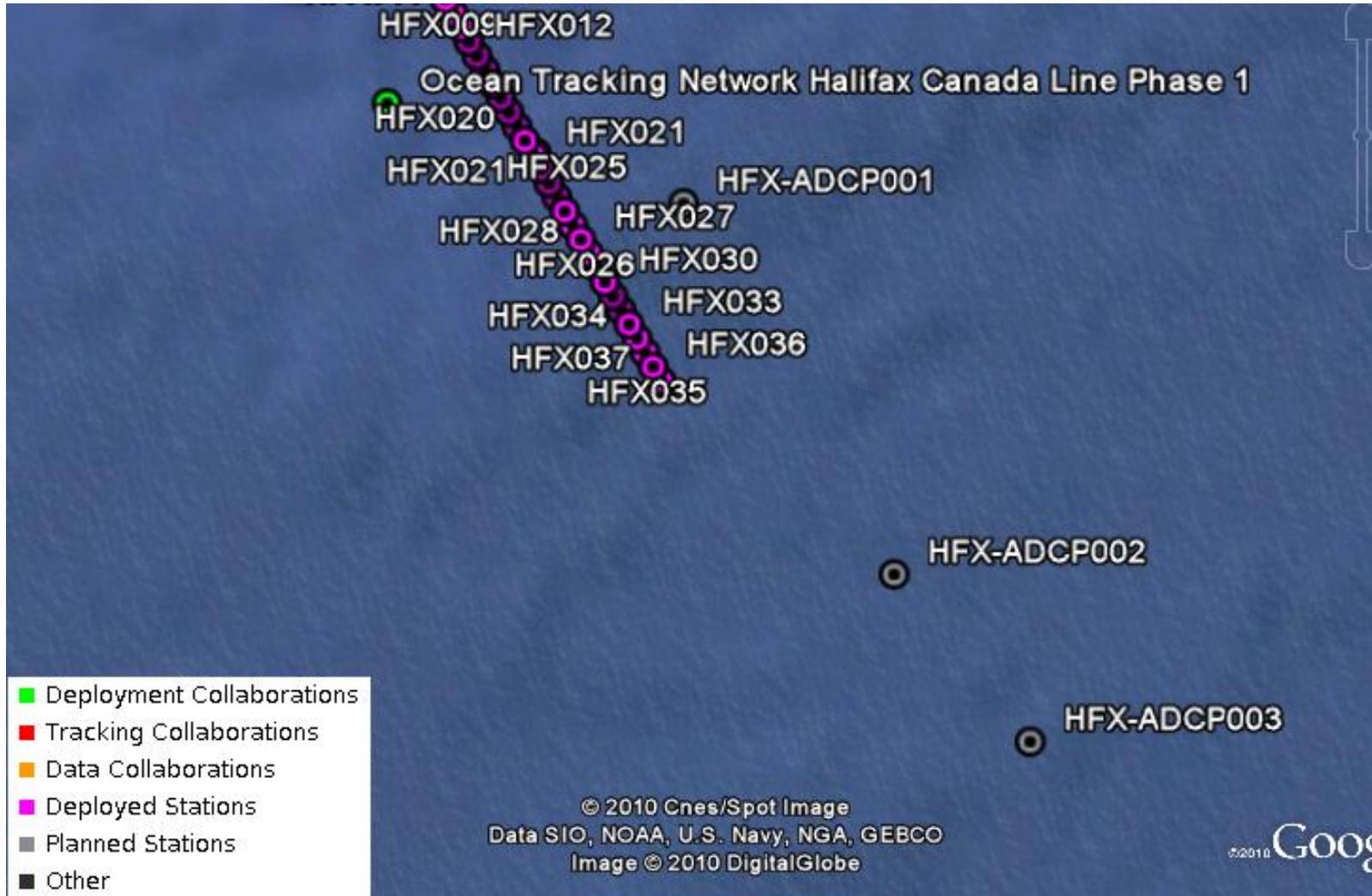
Deployment Collaborations
Tracking Collaborations
Data Collaborations
Deployed Stations
Planned Stations
Other

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
© 2010 Cnes/Spot Image
Image © 2010 DigitalGlobe

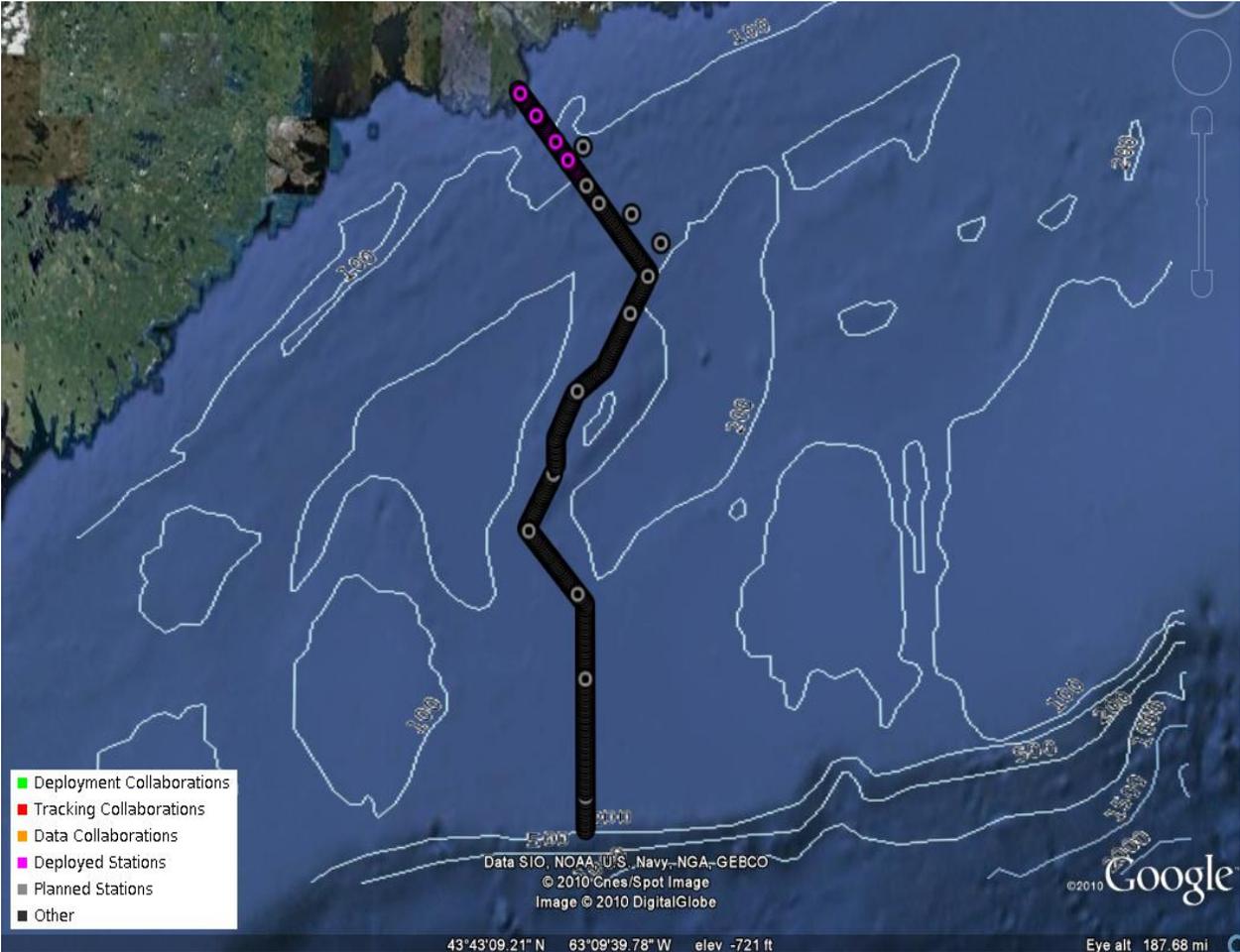
©2010 Google

44°29'45.80" N 63°13'06.86" W elev -66 m Eye alt 77.18 km

OTN Halifax ADCP Line



OTN Halifax Line 1, ADCP Line and Proposed Line 2



OTN Perth Line



- Deployment Collaborations
- Tracking Collaborations
- Data Collaborations
- Deployed Stations
- Planned Stations
- Other

Data SIO

26°34'00.88" S

Ocean Tracking Network Perth Australia Line

- Deployment Collaborations
- Tracking Collaborations
- Data Collaborations
- Deployed Stations
- Planned Stations
- Other

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image © 2010 DigitalGlobe

31°53'46.28" S 115°34'09.27" E elev -34 m Eye alt 86.08 km

OTN Perth Line Collaborator Metadata

Ocean Tracking Network Perth Australia Line Metadata and Data Set

resources_points

- **resource_full_name:** Ocean Tracking Network Perth Australia Line Metadata and Data Set
- **resource_citation:** Semmens, J., McAuley, R., O'Dor, R., Stokesbury, M., Branton, R. 2009. Ocean Tracking Network Perth Australia Line Metadata and Data Set. In: Hobday, A., Meekan, M., O'Dor, R., et al. (eds), Ocean Tracking Network East Indian Metadata and Data Series. Retrieved Month dd, yyyy from oceantrackingnetwork.org.
- **bbox:** (-32.25,-31.75,115.0,116.0)
- **chart:** N/A
- **temp_bound:** 2009-
- **resource_abstract:** The concept for the line that was originally called West Cape Howe and was to capture physical oceanographic data to improve the Ocean model BRAN, is now called the Perth Line. In this system, ocean currents sweep southward from waters around Indonesia. Multiple species of commercially valuable animals interact with this ocean current. BRAN is currently the most sophisticated ocean model in the world, and it is built solely on remote sensing (satellite) data. Measurements from below the ocean's surface will greatly increase the accuracy of the model. OTN receivers will provide the biological part of an ocean observation system that will collect sub surface data from measurement of physical and biological variables using moored sensors and tagged animals. This line was moved slightly north from its original proposed position as the Perth area is more accessible, and recent tracking has proven that the Perth area is a hotspot for multi-species animal migrations. Whale sharks are one species of interest in the system. They draw in many tourists and therefore are very economically valuable to the economy of this area. Other animals that will also be tagged in the vicinity will include Great White sharks and valuable tuna species. AATAMS has many on-going research studies in nearby Nigaloo reef. There will be much valuable information gained on the migrations of these animals as they cross the Perth Line.
- **resource_contact:** Jayson Semmens - Jayson.Semmens@utas.edu.au
- **resource_website:** <http://oceantrackingnetwork.org/news/overseas1.html>
- **getdata:** N/A
- **resource_usage:** A memorandum of understanding with and/or permission from the leading scientific contact is required to gain access to these data prior to the release date listed in the citation. Acknowledge the use of specific records in the form appearing in the Citation field. For information purposes, email to otndc@dal.ca the full citation of any publication made (printed or electronic) that cites OTN or any constituent part. Also see the OTN Data Policy at <http://www.marinebiodiversity.ca/OTN/policies/otn-data-policy-ver-11-oct-30>.
- **ron_id:** 9992002
- **region_name:** East Indian Ocean
- **provider_id:** 1001
- **provider_name:** OTN Global
- **operation_type:** line
- **resource_id:** 0000006

OTN Perth Line Receiver Metadata

PRT052

moorings

- resource_id: 9990006
- collectioncode: PRT
- station_hist: PRT052
- station_type: deployed
- latitude: -32.02214
- longitude: 115.21929
- depth: 198.0
- notes:

instrument	deploy date	last download	recovery date	downloads
VR2W-104483	2009-02-03	2009-05-09	2009-05-09	1
VR2W-104521	2009-05-12	2010-02-17	2010-02-13	1
VR2W-104528	2010-02-23	-	-	-

Directions: [To here](#) - [From here](#)

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2010 DigitalGlobe

32°00'53.87" S 115°20'46.18" E elev -93 m Eye alt 27.42 km

OTN Project Plone CSV Products

Under Construction

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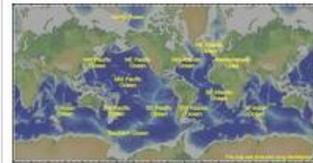
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Login Name

Password

Global

— filed under: [region = global](#), [status = in work](#), [sponsor = GOOS](#), [sponsor = OTN](#)



[See other GOOS pilot projects...](#)

Global Ocean Tracking Network Metadata and Data Atlas

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Need to login to see more including CSV Products.

OTN Project Plone CSV Products

Under Construction

Navigation

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- CSV product links**
- ...
- WMS Link ...
- WFS Link ...
- short list
- long list
- data centres
- data collections
- data inventory
- metadata

Info Welcome! You are no **CSV product links ...**
by [Robert M. Branton](#) — last modified Jul 16, 2010 11:50 AM

Global
by [Ron O'Dor](#) — last modified
— filed under: [region = global](#)

Links to CSV version of OTN Data Products

- **Please review our [Data Policy](#). If you do not agree with our policy then do not access our data.**
- **List of Resources and Providers: [CSV Resources Link](#) (this may take a couple of minutes)**
- **Click the getdata links to get csv file versions of the various data product ...**

Region	Resource	Getdata Links
East Indian Ocean	OTN - Perth Australia Line	MooringSites
Northwest Atlantic Ocean	GEERG - St Lawrence River Estuary Greenland Sharks	Missions, MooringSites
	OTN - Cabot Strait Line Phase 1	MooringSites
	OTN - Halifax Canada Line Phase 1	Missions, MooringSites, MysteryTags

- **Private products require you to enter a userid and password, contact: otndc@dal.ca**
- **These data are also available via [Google Earth](#)...**
- **More products coming soon...**

OTN Perth Line Mooring Sites

Under Construction

CSV product link
by [Robert M. Branton](#) — last

- Please review our
- List of Resources and
- (this may take a co
- Click the getdata link

1	FID	collection	latitude	longitude	depth
2	moorings.PRT		-32.0503	115.7238	10.2
3	moorings.PRT		-32.0445	115.7241	10
4	moorings.PRT		-32.0432	115.716	11
5	moorings.PRT		-32.0415	115.7078	17
6	moorings.PRT		-32.04	115.7	19
7	moorings.PRT		-32.0379	115.6926	19
8	moorings.PRT		-32.0365	115.6848	21
9	moorings.PRT		-32.0343	115.6771	19

Region	Resource	Getdata Links
East Indian Ocean	OTN - Perth Australia Line	MooringSites
Northwest Atlantic Ocean	GEERG - St Lawrence River Estuary Greenland Sharks	Missions, MooringSites
	OTN - Cabot Strait Line Phase 1	MooringSites
	OTN - Halifax Canada Line Phase 1	Missions, MooringSites , MysteryTags

- Private products require you to enter a userid and password, contact: otndc@dal.ca
- These data are also available via [Google Earth...](#)
- More products coming soon...

OTN Halifax Line Missions

Under Construction

CSV product link

by [Robert M. Branton](#) – last

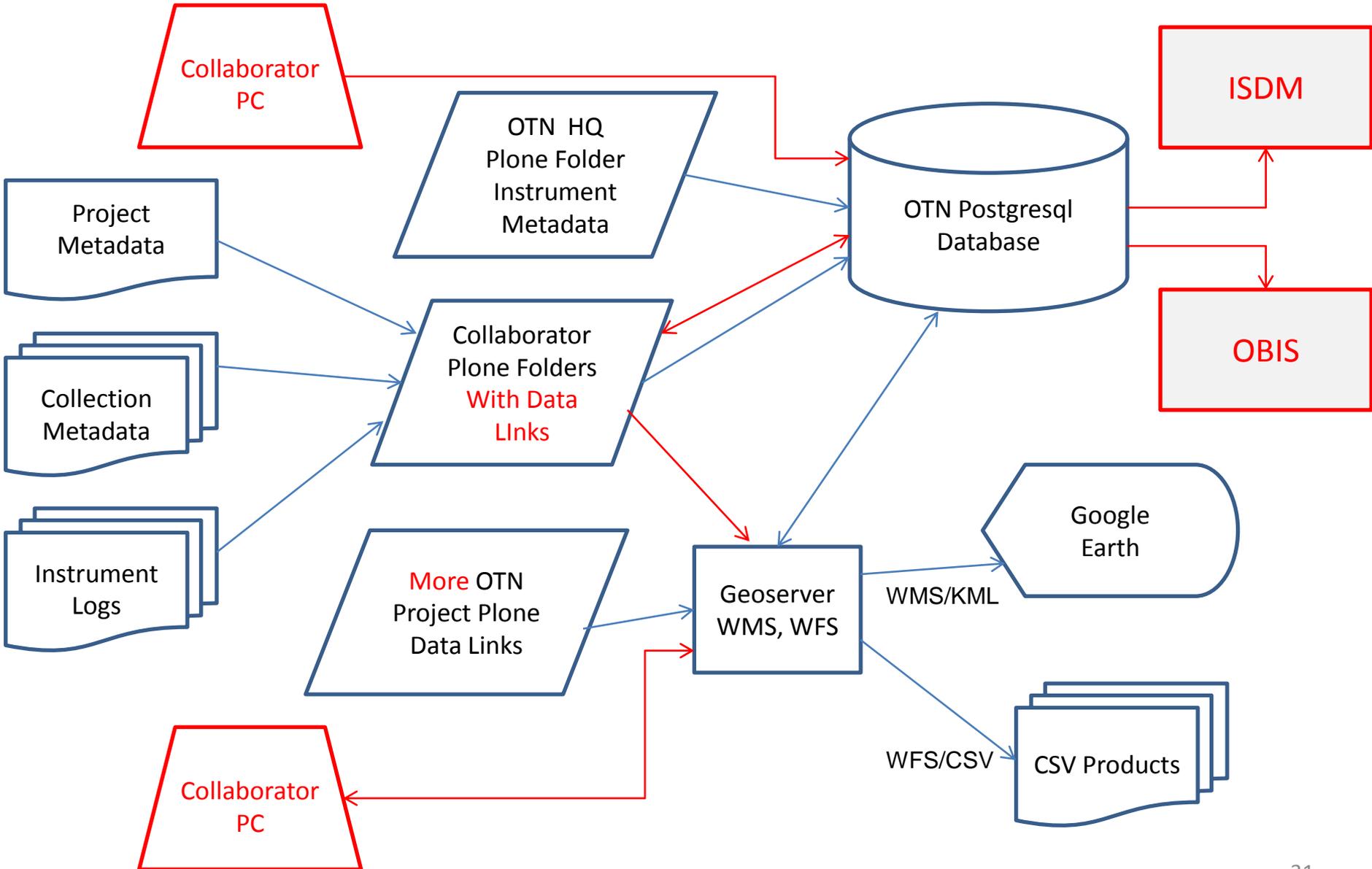
- Please review our
- List of Resources and
- (this may take a couple
- Click the getdata link

FID	resource	otn_mission	host_mission	vessel_name	mission_date	chief_scientist	data_collector	other_personnel	destination	weather
2	missions.HFX	C62008042	0	C6	2008-04-2		Bates D	0	HFX	0
3	missions.HFX	C62008042	0	C6	2008-04-2		Bates D	0	HFX	0
4	missions.HFX	C62008042	0	C6	2008-04-2		Smith PC	0	HFX	0
5	missions.HFX	C62008050	0	C6	2008-05-0		Smith PC	0	HFX	0
6	missions.HFX	C62008052	0	C6	2008-05-2		Bates D	0	HFX	0
7	missions.HFX	C62008053	0	C6	2008-05-3		Bates D	0	HFX	0
8	missions.HFX	DOMINI20	BIO200805	Dominion	2008-09-2		Bates DL	Kirchhoff	Halifax line	sunny, fine

Region	Resource	Getdata Links
East Indian Ocean	OTN - Perth Australia Line	MooringSites
Northwest Atlantic Ocean	GEERG - St Lawrence River Estuary Greenland Sharks	Missions, MooringSites
	OTN - Cabot Strait Line Phase 1	MooringSites
	OTN - Halifax Canada Line Phase 1	Missions, MooringSites, MysteryTags

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- These data are also available via [Google Earth...](#)
- More products coming soon...

Future OTN Data Workflow Diagram



Future OTN Data Access and Products

Place site links to Collaborator/OTN developed postgresql queries and/or WMS, WFS products. Facilitating creation and Internet access of individual collaborator and/or regional standard reports.

Add bathymetry, add additional oceanographic data.

Detections and animal tracks WMS, WFS products.

Get Data and other (e.g. charts) links from KML Collaborator Metadata.

Distribution to Ocean Biogeographic Information System (OBIS) of public tag releases, with links to tracks.

Collaborator password protected access to OTN postgresql collaborator data schema.

Collaborator password protected access to OTN Geoserver collaborator schema layers.

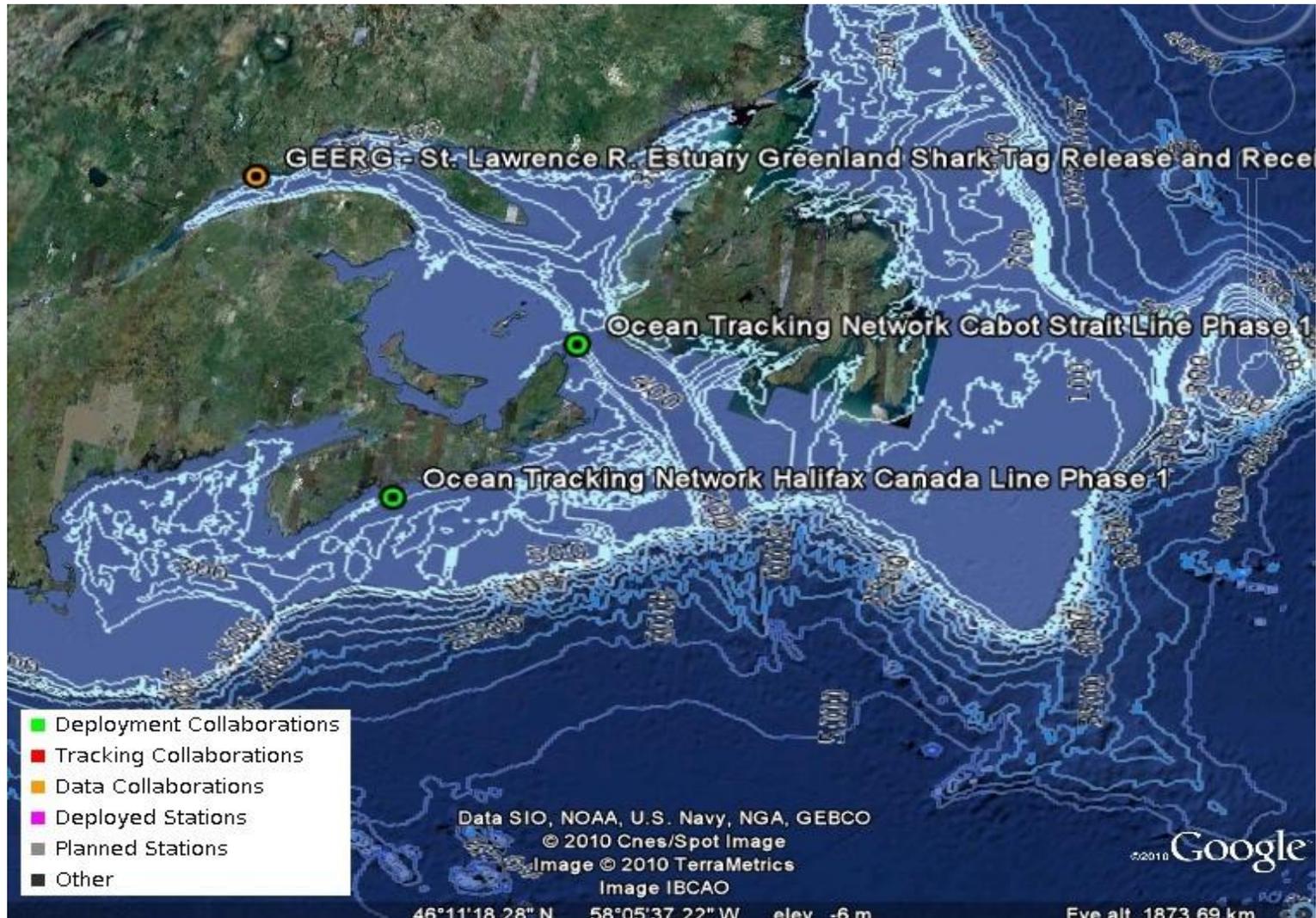
Final archival of entire (raw files, database content, geoserver products, etc) OTN data collection at DFO, Integrated Science Data Management (ISDM).
OTN collaborator data restriction agreements will be honoured.

Regional Summary Report Example

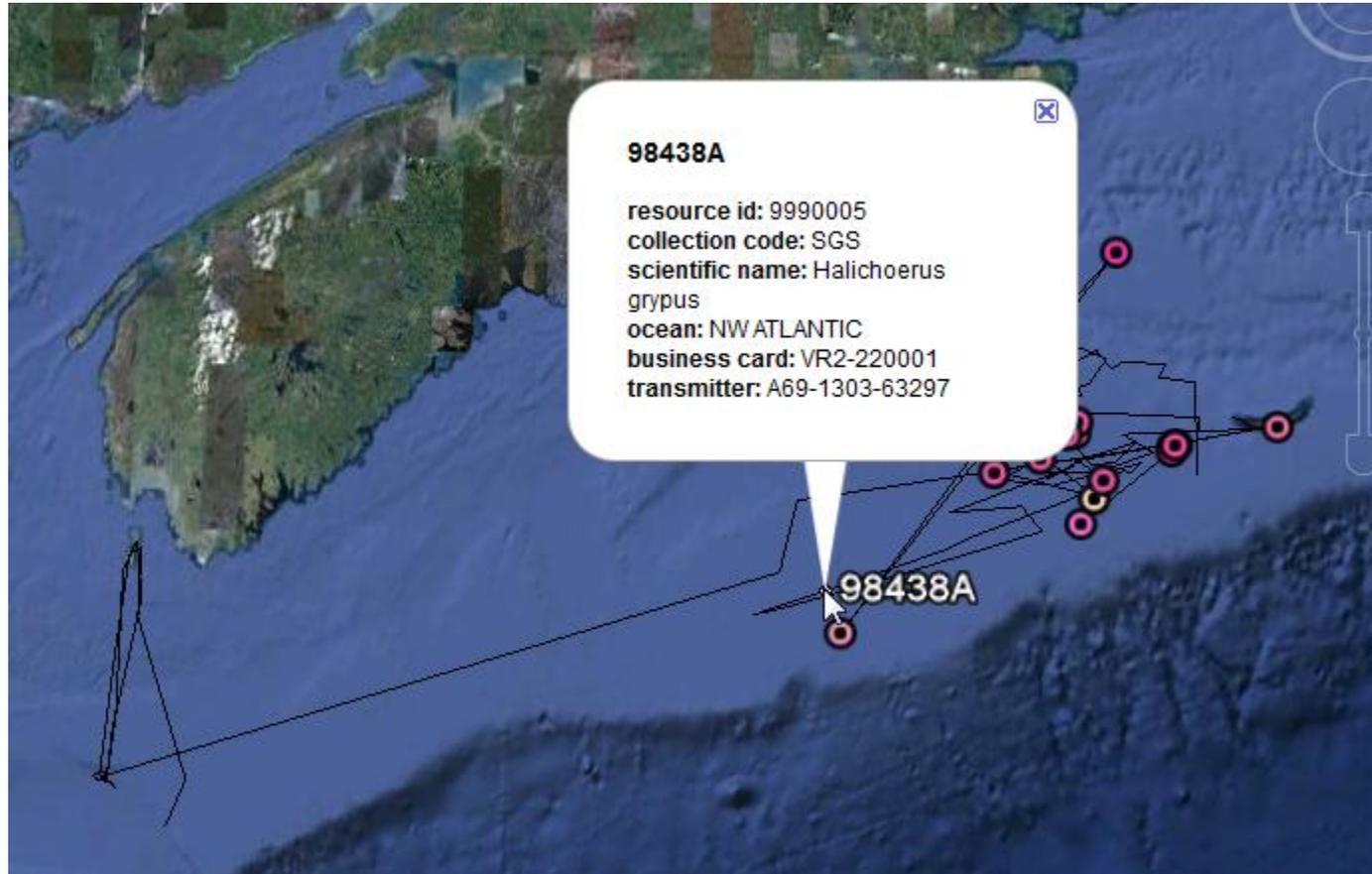
NW Atlantic Draft Report Statistics from postgresql queries.

Summary of Detections							
Collaborator	2005	2006	2007	2008	2009	2010	Species
<i>Halifax Line:</i> Stations HFX1-37	NA	NA	NA	408	197	1	Atlantic salmon
<i>Minas Passage:</i> Stations MPS1-MPS12	NA						
<i>Cabot Strait/Strait of Canso:</i> Stations CBS1-CBS37	NA	NA	NA	NA	144	4422	Atlantic salmon, Atlantic cod, Atlantic bluefin tuna
Summary of Individual Tags Detected							
Collaborator	2005	2006	2007	2008	2009	2010	Species
<i>Halifax Line:</i> Stations HFX1-37	NA	NA	NA	28	50	1	Atlantic salmon
<i>Minas Passage:</i> Stations MPS1-MPS12	NA						
<i>Cabot Strait/Strait of Canso:</i> Stations CBS1-CBS37	NA	NA	NA	NA	2	19	Atlantic salmon, Atlantic cod, Atlantic bluefin tuna
Total	0	0	0	28	52	20	
Number of Detected Tags by Release Organization							
Organization							
NOAA	-	-	-	-	16	-	
UOM	-	-	-	-	-	-	
ASF	-	-	-	-	-	1	
UMASS	-	-	-	-	-	-	
USGS	-	-	-	-	-	-	
DMR	-	-	-	-	-	-	
DFO	-	-	-	1	2	10	
USM	-	-	-	-	-	-	
ECU	-	-	-	-	-	-	
UNH	-	-	-	-	-	-	
MSA	-	-	-	-	-	1	
TAG	-	-	-	-	-	5	
UNKNOWN	-	-	-	27	34	3	
Total	0	0	0	28	52	20	

FAO Bathymetry



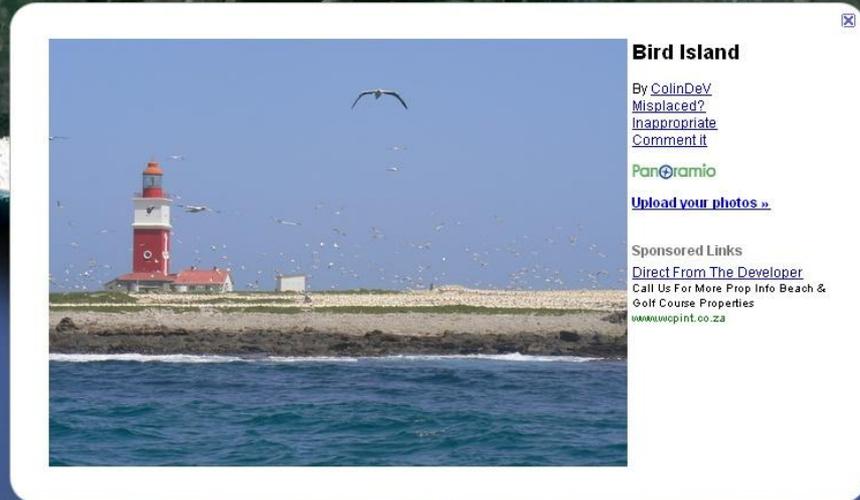
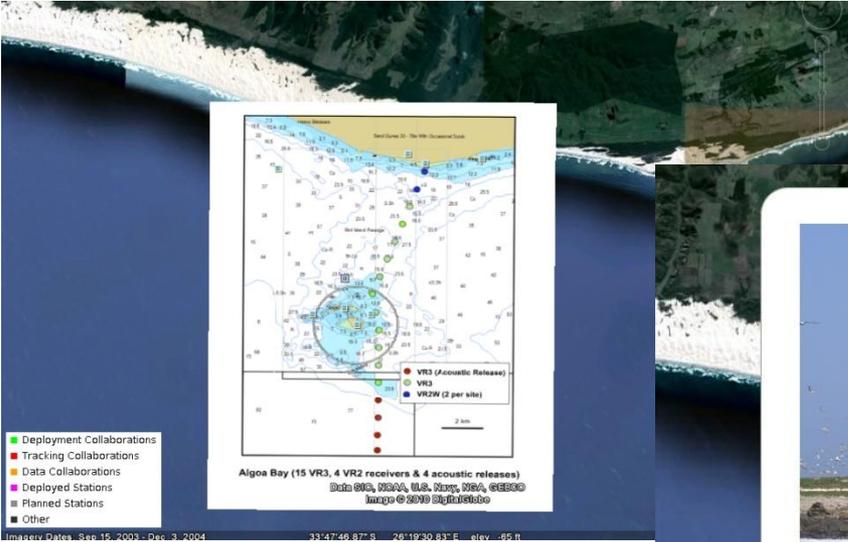
Animal Track including VMT detections of other animals



Maps & Charts

Algoa Bay Acoustics Receivers

Fade Image, add MPA and Panoramio Photos



Distribution to OBIS and ISDM

Home Search Data Maps About OBIS - Contact English

OBIS OCEAN BIOGEOGRAPHIC INFORMATION SYSTEM

Welcome to OBIS!
Last updated on Tue, 2010-09-21 21:59. Originally submitted by svbergher on 2010-05-25 15:58.

OBIS allows users to search marine species datasets from all of the world's oceans.



With our evolving OBIS database repository, users can identify biodiversity hotspots and large-scale ecological patterns, analyze dispersions of species over time and space, and plot species' locations with temperature, salinity, and depth.

To search the database, please select the "Search Data" option in the toolbar above.

If you want to see overview maps of OBIS content and derived information, select "Maps".

SEARCH OBIS PAGES

SEARCH

IOBIS.ORG VERSION 2

Looking for the version of the IOBIS website from before September 2010? IOBIS version 2 is still running here

RECENT NEWS

2010-09-21
Launch of the new OBIS web site imminent

2010-09-02
Prototype OBIS web site becomes available

2010-09-02
IndOBIS node manager on study visit

2010-08-02
New Data on OBIS

2010-07-15
New members of staff

more

Species Search

Common name contains African lanternshark

Taxonomic Tree

Species Information

Scientific name: *Etmopterus pinnatus*

Authority: Bigelow, Schroeder & Simon, 1953

Rank: Species

Common names: African lantern shark (English), African lanternshark (English)

Geographic coverage: 17.0833 -11.8833,13.3333

Temporal coverage: 1948-10-14 - 1963-11-27

#records this rank: 691

#records counting branches: 691

Environmental Information

Bottom depth: 13 - 3,096 m

Sample depth: 320,000 - 493,000 m

Temperature: 8.561 - 28.042 °C

Nitrate: 0.145 - 34.072 umol/l

Salinity: 30.652 - 35.047 PPS

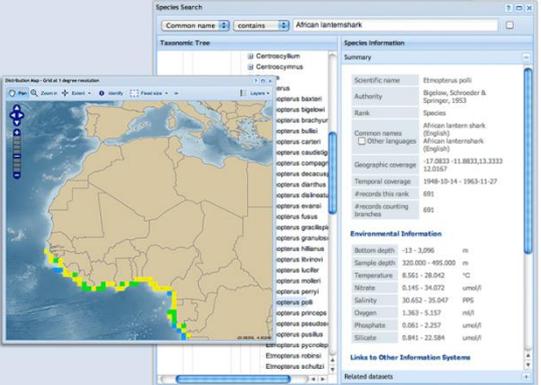
Oxygen: 1.363 - 5.157 mg/l

Phosphate: 0.862 - 1.251 umol/l

Silicate: 0.841 - 22.584 umol/l

Links to Other Information Systems

Related datasets



CENSUS OF MARINE LIFE

RUTGERS

OBIS strives to document the ocean's diversity, distribution and abundance of life. Created by the Census of Marine Life, OBIS is now part of the Intergovernmental Oceanographic Commission of UNESCO, under its International Oceanographic Data and Information Exchange programme

www.iobis.org

Fisheries and Oceans Canada
www.dfo-mpo.gc.ca

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Home > Science > Data and Products > Integrated Science Data Management.

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Integrated Science Data Management (ISDM)

Providing Access to Ocean Data

ISDM's mandate is to manage and archive ocean data collected by DFO, or acquired through national and international programmes conducted in ocean areas adjacent to Canada, and to disseminate data, data products, and services to the marine community in accordance with the policies of the Department.

Programme Descriptions

Show descriptions

- Argo
- Atlantic Zone Monitoring Programme (AZMP)
- BioChem
- Climate Variability (CLIVAR)
- National Contaminants Information System (NCIS)
- Tides and Water Levels
- Global Temperature-Salinity Profile Project (GTSP)
- Joint Commission on Oceanography and Marine Meteorology (J-COMM)
- National Oceanographic Data Centre (NODC)
- Ship of Opportunity Programme (SOOP) Implementation Panel

Quick Links

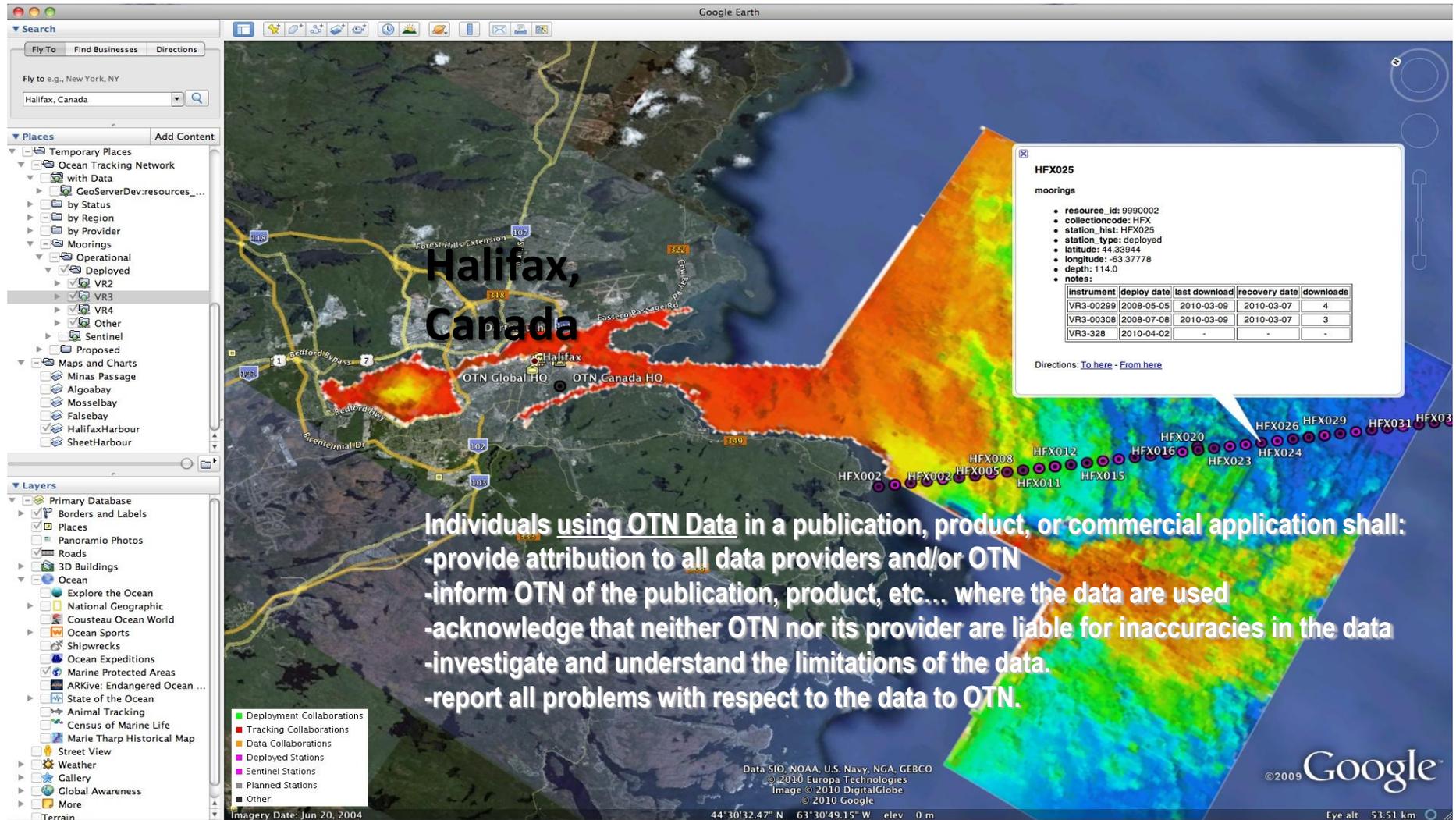
- Argo
- AZMP
- BioChem
- CLIVAR
- Code List
- Contaminants
- Currents
- Drifting Buoys
- Geoport
- GTS code forms and advisories
- GTSP
- ICES
- J-COMM
- NAFO
- Ocean Profiles
- Offshore Oil & Gas
- Remote Sensing
- RNODC
- SOOP
- Standards
- Thermosalinographs
- Tides and Water Levels
- TWL Applications
- Waves
- WOCE

Proactive Disclosure



www.meds-sdmm.dfo-mpo.gc.ca/isdm-gdsi/index-eng.html

NRCan Multibeam Bathymetry



OTN's Outreach Site

The most recent news item shown here is about deployment of acoustic receivers in and around the Minas Passage tidal power site in Nova Scotia's Bay of Fundy, location of the 'world's highest tides' and so the 'gold standard for moored instrument deployments' .

The screenshot displays the OTN website interface. At the top, there are navigation links: "FACULTY OF SCIENCE | HALIFAX | NS | CANADA B3H 4J1 | +1 (902) 494-2267" and a search bar. The main content area features the OTN logo and the text "Headquartered at Dalhousie University, Canada". A prominent headline reads "A new world standard for ocean research". Below this, a news article is displayed with the text: "Our climate is changing — of this we are sure. Marine life survival is becoming uncertain due to overfishing and changing migration patterns. Animals such as polar bears are becoming visibly anxious as their habitats begin to melt. Oceans are becoming warmer, the polar ice caps are melting. The alarming thing is that we don't really know why. Information from beneath the sea's surface is very limited, despite the fact that continued human survival is directly linked to stable oceanic life." The article is dated "Acoustic receiver assemblies lay on the deck of the fishing vessel Cape Rose ready for deployment on the OTN Minas Passage Line, July 14, 2010 (photo by Duncan Bates, OTN HQ)". Navigation elements include "Read more..." and "View more photos...". The left sidebar contains a menu with items like "OTN HOME", "ABOUT THE PROJECT", "PARTNERSHIPS", "NEWS FROM OTN", "OTN IN THE NEWS", "OPPORTUNITIES WITH OTN", "MULTIMEDIA GALLERY", "CONTACT OTN", and "RELATED LINKS". Below the menu, there are sections for "OTN Canada Now Recruiting!" with buttons for "OTN Canada" and "OTN Global", "Members:" with a "Members login" link, and "OTN Funding Partners:" with logos for "CFI" and "NSERC CRNSG". The background of the website is a collage of images showing researchers on a boat, acoustic receiver equipment, and a diver underwater.