

Ocean Tracking Network Acoustic Telemetry Receiver Stations

Type Enterprise Geodatabase Feature Class

Tags Acoustic Telemetry, OTN, Receivers, Stations, RWSC, Protected Fish

Summary

This dataset displays acoustic telemetry receivers submitted to, and maintained, by the Ocean Tracking Network (OTN). These span multiple projects in multiple locations all over the world, though the network is headquartered in Nova Scotia, Canada. All data is public and stored in publicly accessible Geoservers. Data is pulled and manipulated.

Description

“OTN collaborators are part of a global community of researchers that are developing a comprehensive examination of aquatic life and ocean conditions. This information is critical for decision makers developing sustainable management plans and policies in changing global environments. Registering your project with the Ocean Tracking Network (OTN) connects you and your research to a global community of telemetrists. Data will be cross-referenced, quality controlled, and made available to you in a wide range of formats for analysis and visualization within the OTN database.” Upon joining the Network, users must sign a User Agreement, which outlines network practices and requirements of membership.

<https://oceantrackingnetwork.org/>

Credits

Ocean Tracking Network: Jon Pye, <jpye@oceantrack.org target="_blank">jpye@oceantrack.org

Use limitations

These data will be used by RWSC and its expert Subcommittees, partners, and other participants to implement the [Science Plan](#), including to understand the extent of ongoing and planned data collection activities, and to coordinate and plan future data collection and research activities with respect to offshore wind. The data will be displayed via online mapping platforms.

Extent

West -130.519960 East -2.690830
North 60.986890 South -19.935500

Scale Range

Maximum (zoomed in) 1:5,000
Minimum (zoomed out) 1:150,000,000

Topics and Keywords ▶

Themes or categories of the resource Oceans

Content type ⇔ Downloadable Data

Export to FGDC CSDGM XML format as Resource Description No

Citation ▶

Title Ocean Tracking Network Acoustic Telemetry Receiver Stations
Creation date 2025-03-03 00:00:00
Publication date 2025-04-04 00:00:00

Presentation formats ⇔ digital map

Citation Contacts ▶

Responsible party - originator

Individual's name Jordan Katz

Organization's name RWSC

Contact information ▶

Phone

Voice NA

Address

Type postal

Delivery point NA

City NA

Administrative area NA

Postal code NA

e-mail address jordan.katz@noaa.gov

Resource Details ▶

Dataset languages ⇔ English (UNITED STATES)

Dataset character set utf8 - 8 bit UCS Transfer Format

Status on-going

Spatial representation type ⇔ vector

Supplemental information

Jon Pye (Director, Data Operations) - Ocean Tracking Network

Processing environment ⇔ Microsoft Windows 10 Version 10.0 (Build 26100) ; Esri ArcGIS 13.4.0.55405

Credits

Ocean Tracking Network: Jon Pye, <jpye@oceantrack.org target="_blank">jpye@oceantrack.org

ArcGIS item properties

Name ⇔ rpt.rpt.Ocean_Tracking_Network_Acoustic_Telemetry_Receiver_Stations
Location ⇔ Server=rwsc-db-pg15.env.duke.edu; Service=sde:postgresql:rwsc-db-pg15.env.duke.edu; Database=rpt; User=rpt; Version=sde.DEFAULT
Access protocol ⇔ ArcSDE Connection

Extents ►

Extent

Description
Temporal Extent reflects the Last Deploy Date

Geographic extent

Bounding rectangle
Extent type
Extent used for searching
West longitude -130.519960
East longitude -2.690830
North latitude 60.986890
South latitude -19.935500
Extent contains the resource Yes

Temporal extent

Beginning date 2005-11-01 00:00:00
Ending date 2025-03-31 00:00:00

Extent in the item's coordinate system

westBL ⇔ -130.519960
eastBL ⇔ -2.690830
southBL ⇔ -19.935500
northBL ⇔ 60.986890
exTypeCode ⇔ Yes

Resource Points of Contact ►

Point of contact - originator

Individual's name Jordan Katz
Organization's name RWSC

Contact information ►

Phone

Voice NA

Address

Type postal
Delivery point NA
City NA
Administrative area NA
Postal code NA
e-mail address jordan.katz@noaa.gov

Resource Maintenance ►

Resource maintenance

Update frequency as needed

Other maintenance requirements

The OTN undergoes a data push three times per year, or every four months. Code will need to be re-run following each data push. Follow ups with individual researchers is required for information from new projects that is not collected by the OTN.

Resource Constraints ►

Constraints

Limitations of use

These data will be used by RWSC and its expert Subcommittees, partners, and other participants to implement the [Science Plan](#), including to understand the extent of ongoing and planned data collection activities, and to coordinate and plan future data collection and research activities with respect to offshore wind. The data will be displayed via online mapping platforms.

Spatial Reference ►

ArcGIS coordinate system

Type ⇔ Geographic
Geographic coordinate reference ⇔ GCS_WGS_1984
Coordinate reference details ⇔
GeographicCoordinateSystem
WKID 4326
XOrigin -400
YOrigin -400
XYScale 999999999.99999988
ZOrigin -100000
ZScale 10000
MOrigin -100000
MScale 10000
XYTolerance 8.983152841195215e-09
ZTolerance 0.001

MTolerance 0.001
HighPrecision true
LeftLongitude -180
LatestWKID 4326
WKT
GEOGCS["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID["WGS_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433],AUTHORIT

Reference system identifier

Value ⇔ 4326
Codespace ⇔ EPSG
Version ⇔ 6.2(3.0.1)

Spatial Data Properties ►

Vector ►

Level of topology for this dataset ⇔ geometry only

Geometric objects

Feature class name rpt.rpt.Ocean_Tracking_Network_Acoustic_Telemetry_Receiver_Stations
Object type ⇔ point
Object count ⇔ 3571

ArcGIS Feature Class Properties ►

Feature class name rpt.rpt.Ocean_Tracking_Network_Acoustic_Telemetry_Receiver_Stations
Feature type ⇔ Simple
Geometry type ⇔ Point
Has topology ⇔ FALSE
Feature count ⇔ 3571
Spatial index ⇔ TRUE
Linear referencing ⇔ FALSE

Data Quality ►

Data quality report - Conceptual consistency ►

Data quality measure reference

Measure description

The data are represented as coordinate points with longitude and latitude aspects. They constitute both realized receiver locations and proposed locations. Device locations, deployment start/end dates and other metadata are subject to change. Reach out to the listed deployment POC for most up-to-date information.

Data quality report - Completeness omission ►

Data quality measure reference

Measure description

This dataset reflects the most recent present and future known locations of Acoustic Telemetry stations, and is updated every four months. If an end date was not provided, an arbitrary end date was assigned to allow for time-enabled mapping feature to operate.

Lineage ►

Process step ►

When the process occurred 2025-01-01 00:00:00

Description

Pre Processing done by Protected Fish Subcommittee Lead:

1. Ran OTN_CODE.txt file in R. Data is publicly accessible via Geoservers.
2. Capitalized all first letters of words in Row one
3. Added (s) after Operator Column Heading
4. Changed stn to Station in Column Headings
5. Replace lat and long with Latitude and Longitude
6. Added Project_ to Status Column Heading
7. Added _Date to Last_Download Column Heading
8. Added Receiver_ and (m) to Off_Set
9. Added Project_Start_Date Column
10. Added Project_End_Date Column
11. Added Instrument_Type/ to Model Column
12. Added Co_Deployed_Instruments, Co_Deploy_List Columns, Archival_or_Real-Time_Receiver, RWSC_or_ROSA_Database, Regional_Acoustic_Telemetry_Network, Seasonality_of_Receivers, Date_Last_Updated_by_RWSC Column Headings
13. Sort Station_Name A-Z
14. Uploaded CSV back into R and ran attached OTN_Code2.txt file.
15. Opened new file in google Sheets.
16. Sorted data by Last_Recovery by Oldest to newest.
17. Removed Rows that have not been Recovered Since 2021-12-31, keeping blanks.
18. Investigated Projects with blank/NA Last Recovery Dates. If Last_Deploy_Date or Last_Download Date were also blank, or not more recent than 2021-12-31, the row was deleted.
19. Sorted Alphabetically by Collectioncode
20. Filled in additional information from project websites and project personnel.
21. Removed NOAA Penobscot Salmon Tracking trip as we were provided with additional receivers.
22. Filtered Station_Type to remove stations that did not include "Acoustic" or "Transceiver"

Process contact - originator

Individual's name Jordan Katz
Organization's name RWSC

Contact information ►

Phone
Voice NA
Address
Type postal
Delivery point NA
City NA
Administrative area NA
Postal code NA
e-mail address jordan.katz@noaa.gov

Process step ▶
When the process occurred 2025-03-03 00:00:00
Description
XY Table was converted to point layer.

Process contact - processor
Individual's name Samantha Coccia-Schillo
Organization's name RWSC
Contact's position GIS Manager

Contact information ▶
Phone
Voice NA
Address
Type postal
Delivery point NA
City NA
Administrative area NA
Postal code NA
e-mail address scoccia-schillo@outlook.com

Process step ▶
When the process occurred 2025-04-04 00:00:00
Description
Data were published to online server.

Process contact - processor
Individual's name Samantha Coccia-Schillo
Organization's name RWSC
Contact's position GIS Manager

Contact information ▶
Phone
Voice NA
Address
Type postal
Delivery point NA
City NA
Administrative area NA
Postal code NA
e-mail address scoccia-schillo@outlook.com

Distribution ▶
Distribution format
Name ⇔ Enterprise Geodatabase Feature Class

Fields ▶
Details for object rpt.rpt.Ocean_Tracking_Network_Acoustic_Telemetry_Receiver_Stations ▶
Type ⇔ Feature Class
Row count ⇔ 3571
Definition
Acoustic Telemetry Receiver Stations

Definition source
OTN

Field OBJECTID ▶
Alias ⇔ OBJECTID
Data type ⇔ OID
Width ⇔ 4
Precision ⇔ 10
Scale ⇔ 0

Field description ⇔
Internal feature number.

Description source ⇔
Esri

Description of values ⇔
Sequential unique whole numbers that are automatically generated.

Field Shape ►

Alias ⇔ Shape
Data type ⇔ Geometry
Width ⇔ 8
Precision ⇔ 0
Scale ⇔ 0

Field description ⇔
Feature geometry.

Description source ⇔
Esri

Description of values ⇔
Coordinates defining the features.

Field Resource_Full_Name ►

Alias ⇔ Resource Full Name
Data type ⇔ String
Width ⇔ 8000
Precision ⇔ 0
Scale ⇔ 0

Field description
Full name of project

Description source
OTN Geoserver

Field Collectioncode ►

Alias ⇔ Collection Code
Data type ⇔ String
Width ⇔ 8000
Precision ⇔ 0
Scale ⇔ 0

Field description
Project code

Description source
OTN Geoserver

Field Operators ►

Alias ⇔ Operator(s)
Data type ⇔ String
Width ⇔ 8000
Precision ⇔ 0
Scale ⇔ 0

Field description
Affiliation of the project contacts

Description source
OTN Geoserver

Field Contact_Information ►

Alias ⇔ Contact Information
Data type ⇔ String
Width ⇔ 8000
Precision ⇔ 0
Scale ⇔ 0

Field description
Name, email address, and role of those affiliated with the project

Description source
OTN Geoserver

Field Station_Latitude ►

Alias ⇔ Station Latitude
Data type ⇔ Double
Width ⇔ 8
Precision ⇔ 38
Scale ⇔ 8

Field description
Latitude of the station where the receiver is set to be deployed

Description source
OTN Geoserver

Field Station_Longitude ►

Alias ↔ Station Longitude
Data type ↔ Double
Width ↔ 8
Precision ↔ 38
Scale ↔ 8

Field description
Longitude of the station where the receiver is set to be deployed

Description source
OTN Geoserver

Field Receiver_Off_Set_m ►

Alias ↔ Receiver Off Set (m)
Data type ↔ Double
Width ↔ 8
Precision ↔ 38
Scale ↔ 8

Field description
How far from the nominal station location an individual receiver deployment is in meters from the 'intended' station location

Description source
OTN Geoserver

Field Station_Name ►

Alias ↔ Station Name
Data type ↔ String
Width ↔ 8000
Precision ↔ 0
Scale ↔ 0

Field description
Sequential position of the mooring assembly on the array

Description source
OTN Geoserver

Field Project_Deployment_Start_Date ►

Alias ↔ Project/Deployment Start Date
Data type ↔ Integer
Width ↔ 4
Precision ↔ 10
Scale ↔ 0

Field description
Project/Deployment start date or planned project start date for projects that have not begun

Description source
Project website/project personnel

Field Project_Recovery_End_Date ►

Alias ↔ Project/Recovery End Date
Data type ↔ String
Width ↔ 8000
Precision ↔ 0
Scale ↔ 0

Field description
Project/Deployment end date or projected end date for projects that are ongoing

Description source
Project website/project personnel

Field Last_Deploy_Date ►

Alias ↔ Last Deploy Date
Data type ↔ Date
Width ↔ 8
Precision ↔ 0
Scale ↔ 0

Field description
Most recent date a receiver was deployed at the station

Description source
OTN Geoserver

Field Last_Recovery_Date ►

Alias ↔ Last Recovery Date
Data type ↔ Date
Width ↔ 8
Precision ↔ 0
Scale ↔ 0

Field description
Most recent date the deployed receiver was recovered at the station

Description source
OTN Geoserver

Field Station_Type ►

Alias ↔ Station Type
Data type ↔ String
Width ↔ 8000
Precision ↔ 0
Scale ↔ 0

Field description
Purpose of station

Description source
OTN Geoserver

Field Instrument_Type_Model ►

Alias ↔ Instrument Type/Model
Data type ↔ String
Width ↔ 8000
Precision ↔ 0
Scale ↔ 0

Field description
Model number of the instrument as provided by the manufacturer, if NOT acoustic then prefix with instrument type and manufacturer's name or acronym

Description source
OTN Geoserver

Field Co_Deployed_Instruments ►

Alias ↔ Co-Deployed Instruments
Data type ↔ String
Width ↔ 8000
Precision ↔ 0
Scale ↔ 0

Field description
Whether or not there are additional sensors or instruments deployed with the receiver at the station (yes or no). Other is selected if some receivers do have co-deployed instruments and some do not, but the receiver locations of each are not specified

Description source
Project website/project personnel

Field Co_Deploy_List ►

Alias ↔ Co-Deploy List
Data type ↔ String
Width ↔ 8000
Precision ↔ 0
Scale ↔ 0

Field description
If yes to the previous, list of any additional sensors or instruments deployed with the receiver at the station. If no to the previous, NA

Description source
Project website/project personnel

Field Archival_or_Real_Time_Receiver ►

Alias ↔ Archival or Real-Time Receiver
Data type ↔ String
Width ↔ 8000
Precision ↔ 0
Scale ↔ 0

Field description
Whether the receiver collects archival or real-time data

Description source
Project website/project personnel

Field regional_acoustic_telemetry_net ►

Alias ⇔ Regional Acoustic Telemetry Network
Data type ⇔ String
Width ⇔ 8000
Precision ⇔ 0
Scale ⇔ 0

Field RWSC_or_ROSA_Database ►

Alias ⇔ RWSC or ROSA Database
Data type ⇔ String
Width ⇔ 8000
Precision ⇔ 0
Scale ⇔ 0

Field description
Link to project site on the RWSC or ROSA database. NA if project is not in either

Description source
RWSC

Field Project_Status ►

Alias ⇔ Project Status
Data type ⇔ String
Width ⇔ 8000
Precision ⇔ 0
Scale ⇔ 0

Field description
Status of the project

Description source
OTN Geoserver

Field Receiver_Status ►

Alias ⇔ Receiver Status
Data type ⇔ String
Width ⇔ 8000
Precision ⇔ 0
Scale ⇔ 0

Field description
The status of the receiver at the station

Description source
OTN Geoserver

Field Station_Status ►

Alias ⇔ Station Status
Data type ⇔ String
Width ⇔ 8000
Precision ⇔ 0
Scale ⇔ 0

Field description
The status of the station

Description source
OTN Geoserver

Field Seasonality_of_Receivers ►

Alias ⇔ Seasonality of Receivers
Data type ⇔ String
Width ⇔ 8000
Precision ⇔ 0
Scale ⇔ 0

Field description
Whether the receivers are set to be deployed all year-round or are seasonal. If seasonal, seasons provided

Description source

Project website/project personnel

Field Last_Download ▶

Alias ↔ Last Download
Data type ↔ Date
Width ↔ 8
Precision ↔ 0
Scale ↔ 0

Field description
Date the data was last downloaded from the deployed receiver

Description source
OTN Geoserver

Field Date_Last_Updated_By_RWSC ▶

Alias ↔ Date Last Updated By RWSC
Data type ↔ Date
Width ↔ 8
Precision ↔ 0
Scale ↔ 0

Field description
The last date changes were made to the information in the table

Description source
RWSC

Field Metadata_Form ▶

Alias ↔ Metadata Form
Data type ↔ String
Width ↔ 8000
Precision ↔ 0
Scale ↔ 0

Field description
The correct metadata form to use for this receiver

Description source
RWSC

Metadata Details ▶

Metadata language ↔ English (UNITED STATES)
Metadata character set utf8 - 8 bit UCS Transfer Format

Scope of the data described by the metadata ↔ dataset
Scope name ↔ dataset

Last update ↔ 2025-04-07

ArcGIS metadata properties

Metadata format ArcGIS 1.0
Standard or profile used to edit metadata FGDC

Created in ArcGIS for the item 2025-04-04 20:14:08
Last modified in ArcGIS for the item 2025-04-07 09:43:04

Automatic updates

Have been performed Yes
Last update 2025-04-07 09:43:04

Metadata Contacts ▶

Metadata contact - originator

Individual's name Jordan Katz
Organization's name RWSC

Contact information ▶

Phone
Voice NA
Address
Type postal
Delivery point NA
City NA
Administrative area NA
Postal code NA
e-mail address jordan.katz@noaa.gov

Metadata Maintenance ▶

Maintenance
Update frequency as needed