

CETACEAN Update

Compilation of Environmental, Threat, and Animal Data for Cetacean Population Health Analyses Platform

GCOOS Team

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Credit: NOAA Fisheries/J. Cotton



Credit: NOAA Alaska Fisheries Science Center/Kim Shelden



Credit: NOAA Fisheries

CETACEAN Project Objectives

- ❖ Create a platform to provide access to data and analytical products related to cetaceans and the stressors that affect them (GCOOS)
 - ❖ Open access data
 - ❖ Easy searchability
 - ❖ Easy visualization
- ❖ Data pipeline to AOML team for web application
- ❖ funded by the Deepwater Horizon Open Ocean Trustee Implementation Group

Data Categories

- ❖ Population Data
 - ❖ Federal data
 - ❖ Movement data
 - ❖ Species distribution models
- ❖ Stressor Data (Build one)
 - ❖ Vessel traffic
 - ❖ Anthropogenic noise
 - ❖ Fishing location and effort
 - ❖ Offshore wind lease sales
- ❖ Environmental Data (Build two)



CETACEAN GIS Data Portal

Browse

Compilation of Environmental, Threat, and Animal Data for Cetacean Population Health Analyses Platform (CETACEAN)

CETACEAN GIS Data Hub is currently under active development, and we welcome your feedback! If you encounter any technical issues or have recommendations for improvements, please contact **Jerad King** at jerad.king@gcoos.org.

For issues related to datasets or if you would like to **contribute data to the project**, please contact **Megan Howson** at megan.howson@gcoos.org.

We have successfully completed the compilation of animal datasets and are now in the process of acquiring and processing our next two dataset categories: **threat** and **environmental data**.



[Population Data](#)



[Threat Data](#)



[Environmental Data](#)



[Ancillary Data](#)

Explore data by collection

GOMMAPPS Vessel and Aerial Surveys



2018 GoMMAPPS Vessel (GU) Survey

Cetacean visual observations using line-transect survey...

[Explore](#)



2018 GoMMAPPS Vessel (PG) Survey

Cetacean visual observations using line-transect survey...

[Explore](#)



2017 GoMMAPPS Vessel Survey

Cetacean visual observations using line-transect survey...

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2018 GoMMAPPS Aerial Survey

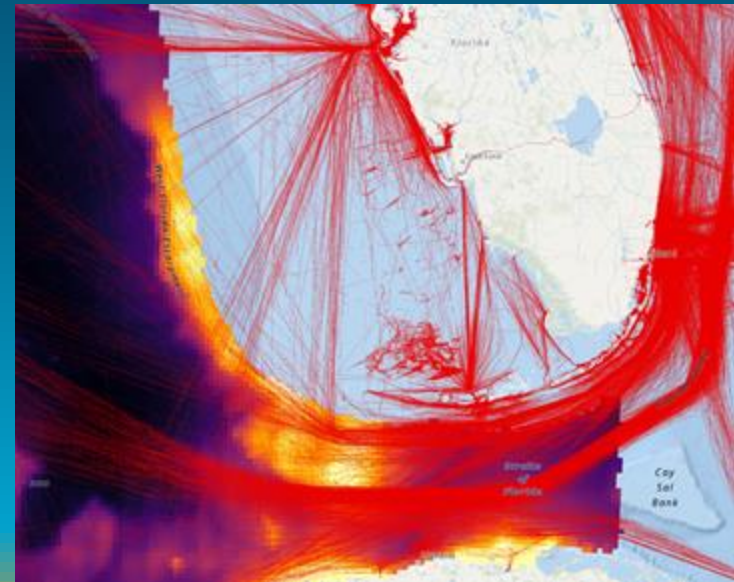
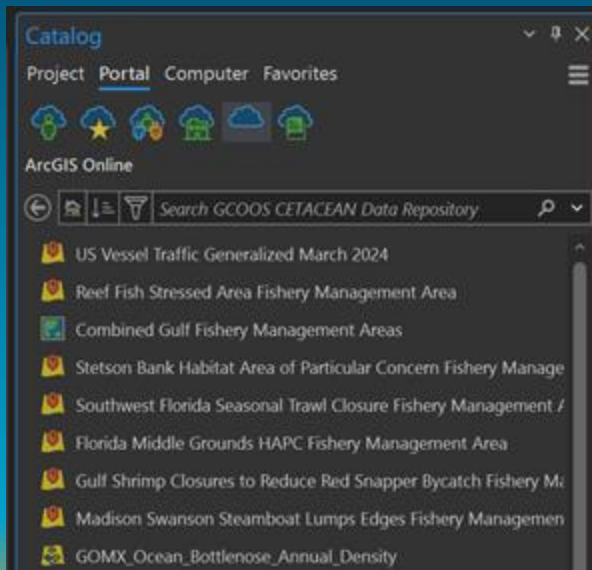
Cetacean and sea turtle visual observations using line-transect survey...

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CETACEAN as a GIS

- ❖ CETACEAN, its data, applications, and services all operate within the ArcGIS Online ecosystem.
- ❖ Seamless integration of data into Esri cloud-based and local applications.



Supporting Applications

- ❖ ERDDAP2AGOL
 - ❖ Adds NRT ERDDAP environmental data to the data repository
 - ❖ Clone your own ERDDAP service to ArcGIS Online
 - ❖ Scalable, individual or batch datasets

- ❖ CETACEAN Data Atlas
 - ❖ Enhance a user's ability to choose data
 - ❖ Alternative browsing option

Supporting Applications: ERDDAP2AGOL

```
Create ERDDAP Item
Select the server of the dataset you want to create an AGOL item for.
1. GCOOS
2. Coastwatch
3. back
: 1
Enter the datasetid for the dataset you want to create an AGOL item for.
2. back
: CBI_130

JSON file saved to /arcgis/home/das_conf/CBI_130.json

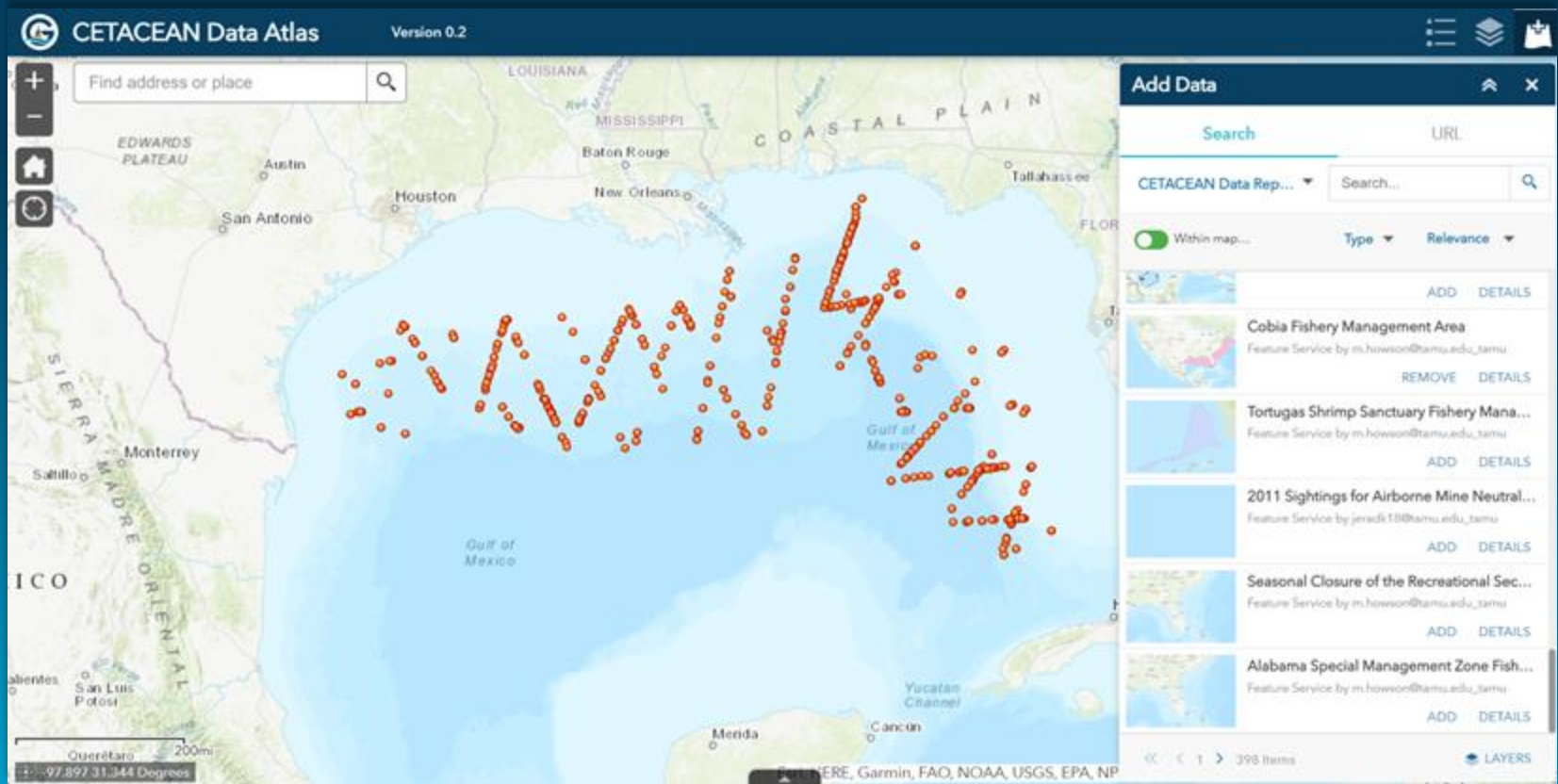
There are 401 days worth of records

Attributes: ['sea_water_practical_salinity_1', 'sea_surface_temperature_1']
Would you like to create a seed file? (y/n): n
Generated URL: https://erddap.gcoos.org/erddap/tabledap/CBI_130.csv?longitu
ty_1%2Csea_surface_temperature_1%2Ctime&time%3E%3D2023-05-01T00:30:00Z&time%
22)
:

Successfully connected to ArcGIS Online on maps.arcgis.com
Successfully uploaded CBI_130 to ArcGIS Online
Item Details ->
Item ID: a9aa0538af474e34b9b060e15e774afa
Log Updated
```



Supporting Applications: CETACEAN Data Atlas



Next Steps

- ❖ Continue to process and populate the Hub with threat data
- ❖ Development of ERDDAP2AGOL and CETACEAN Data Atlas
- ❖ Addition of THREDDS and ERDDAP environmental data to Hub
- ❖ Elicit feedback from users

Sea Turtle Atlas

- ❖ Began September 2024
- ❖ funded by the Deepwater Horizon Open Ocean Trustee Implementation Group
- ❖ Comprehensive understanding of leatherback habitat use in the Gulf of Mexico
- ❖ Comprehensive understanding of loggerhead, green, and Kemp's ridley movement and use of the Louisiana coastal waters
- ❖ Overlap of sea turtle nesting and mating habitat with a specific project occurring near Port Aransas, TX
- ❖ Ensure public data access, and monitor the use and reporting of Sea Turtle Atlas

Sea Turtle Atlas Next Steps

- ❖ Develop a Hub, similar to CETACEAN
- ❖ Identify and acquire population data
- ❖ Work with independent researchers and groups to establish a data flow into Sea Turtle Atlas