




CIOOS
CANADIAN INTEGRATED
OCEAN OBSERVING SYSTEM

CIOOS Update V

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Scott Bruce, CIOOS Atlantic / Marine Institute

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Funded by:  Fisheries and Oceans
Canada

Pêches et Océans
Canada

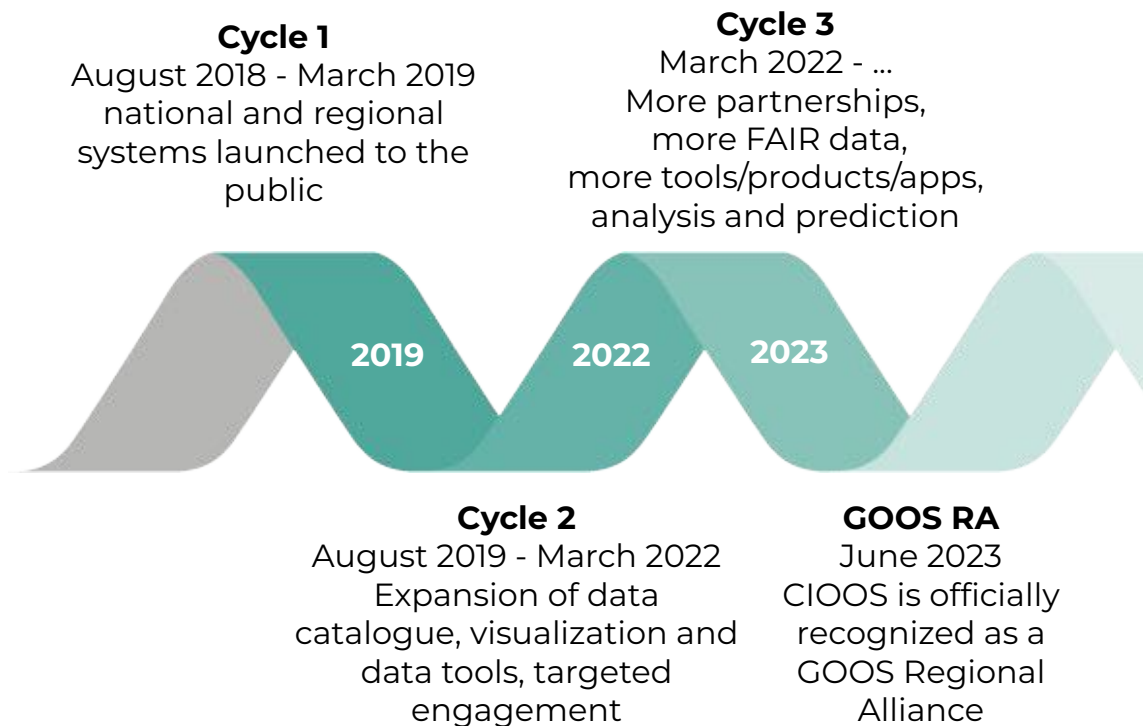


Founded Through Collaboration



Looking ahead - Cycle 3 and beyond

cioos.ca/strategic-plan





Technical Highlights

CIOOS Structure

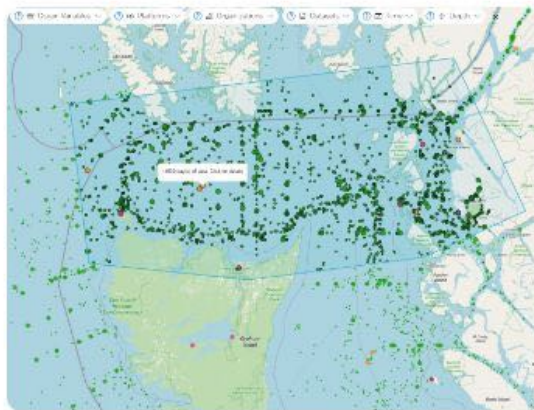




National Tools

CIOOS Data Tools

How would you like to discover ocean data today?



Data Explorer

Use the map to search geographically for data, across supported datasets. Filter, aggregate, and download just the data that meets your criteria. Data Explorer downloads are in a standardized (.csv) format.



Catalogue Map

Use the interactive map to search geographically and find complete datasets. Find the datasets in their original format; many can be converted to a format that meets your needs.

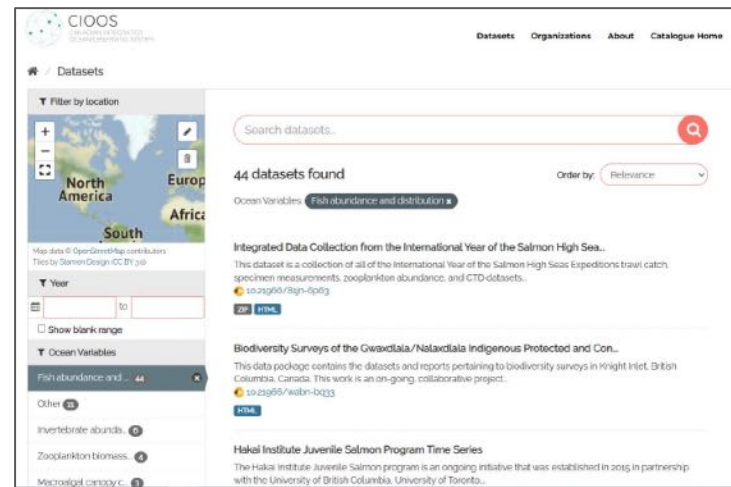
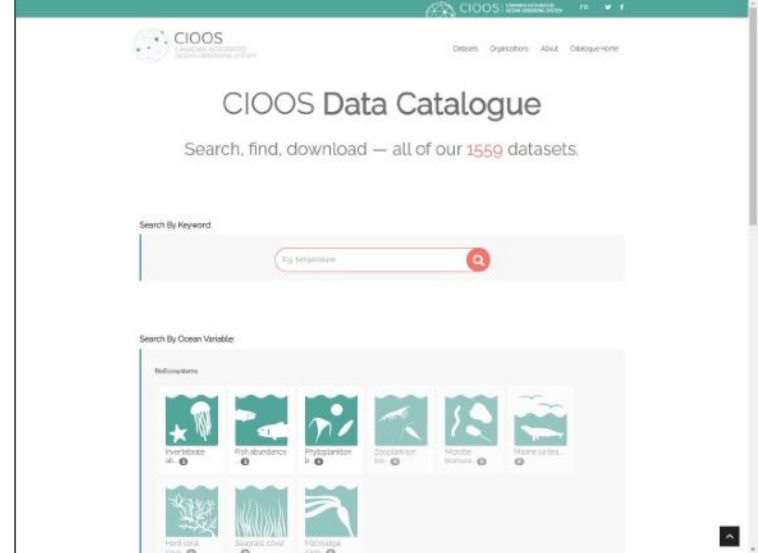


Data Catalogue

Use filters and keywords to search the full collection of CIOOS datasets across Canada. You can use the catalogue to find the data or metadata in its original format, and many can be converted to a format that meets your needs using the ERDDAP server. Learn how to use [ERDDAP in our video](#).

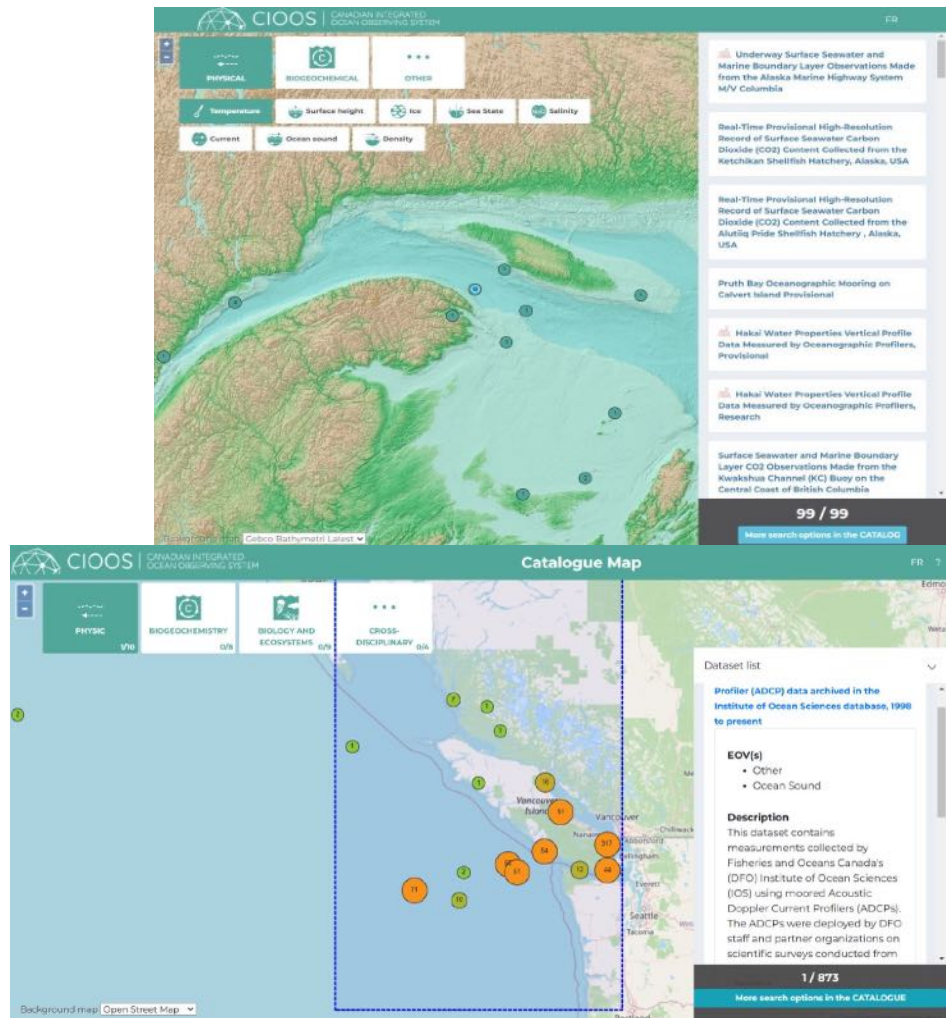
Data Catalogue

- Search, find and download datasets
- Ocean variables categories :
 - BioEcosystems
 - Biogeochemical
 - Cross-disciplinary
 - Physical
- Built on the CKAN web platform
- Integrated into Ocean InfoHub
- See Matt Foster for more info



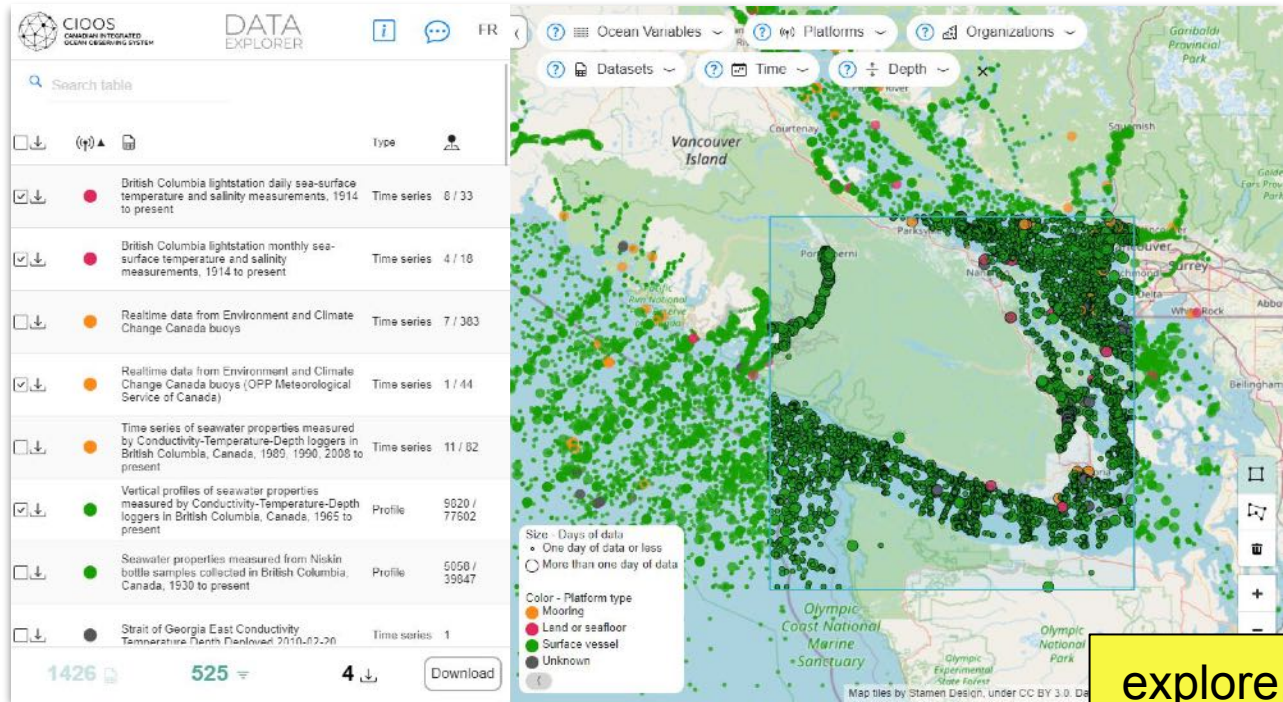
Catalogue Map

- Interactive map to search geographically
- Complete datasets
- Datasets in original format
- Filtering by EOVs
 - Physic
 - Biogeochemistry
 - Biology and ecosystems
 - Cross-disciplinary
- Side panel with the dataset information
(title, description, data provider, and links to the Catalogue entry and data files)



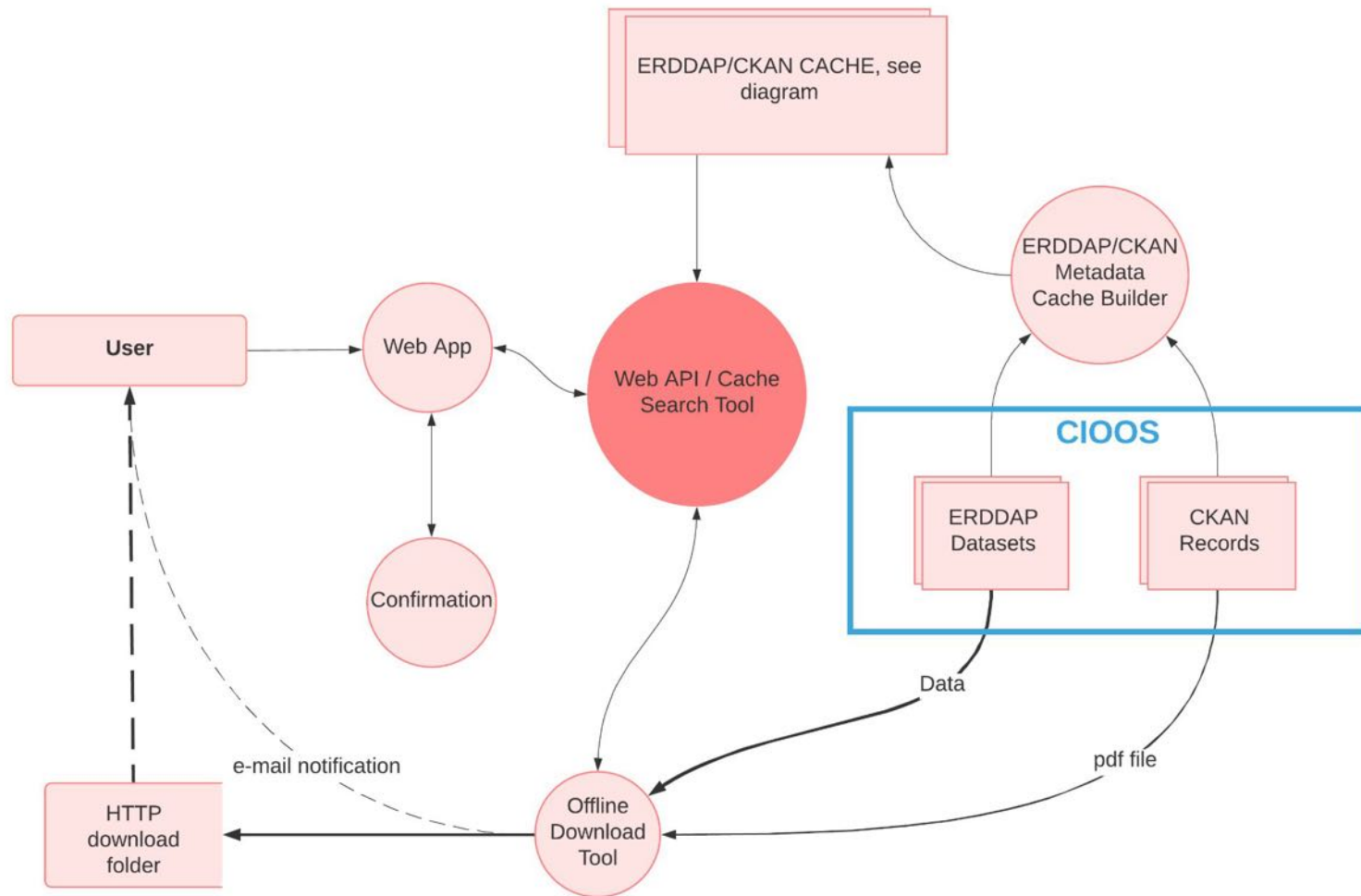
Data Explorer

“An intuitive map-based interface for exploring and downloading ocean data”

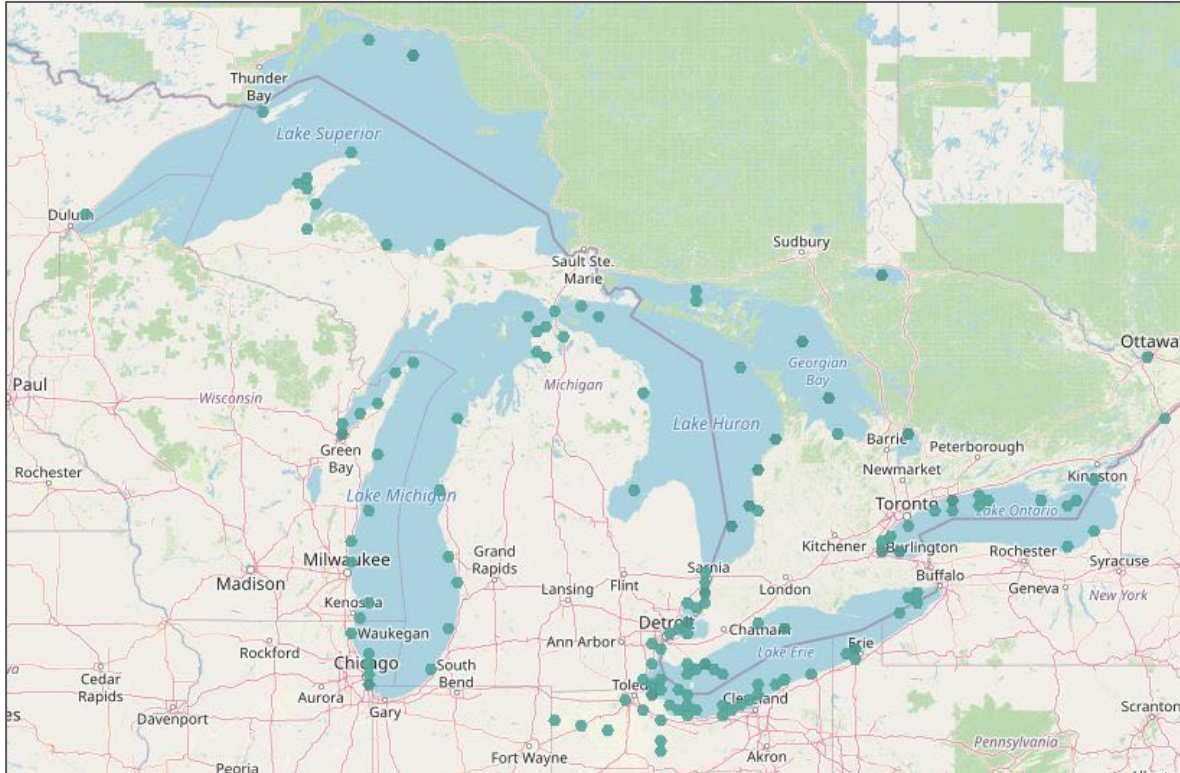


explore.cioos.ca

New version released Oct 2022: simplified user experience, better filter control, add data previews, enables easier downloads



GLOS Data in CIOOS



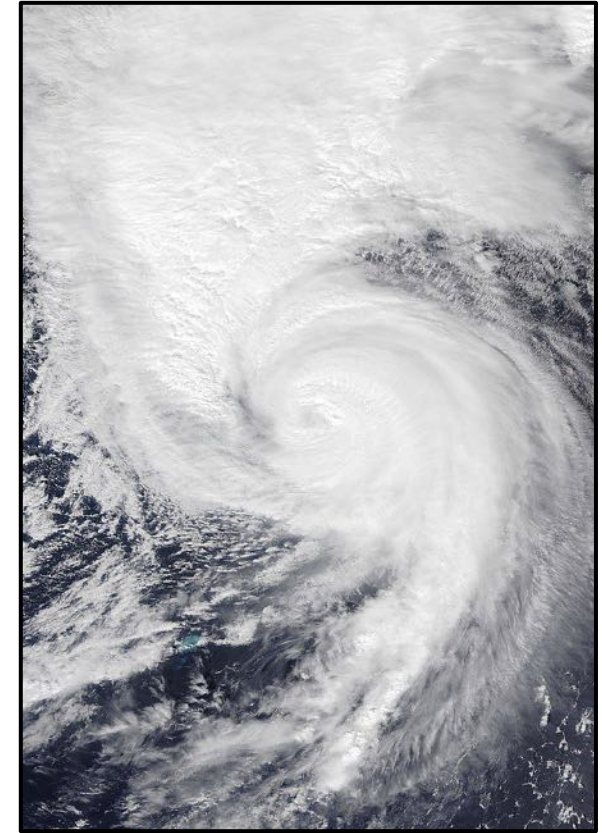
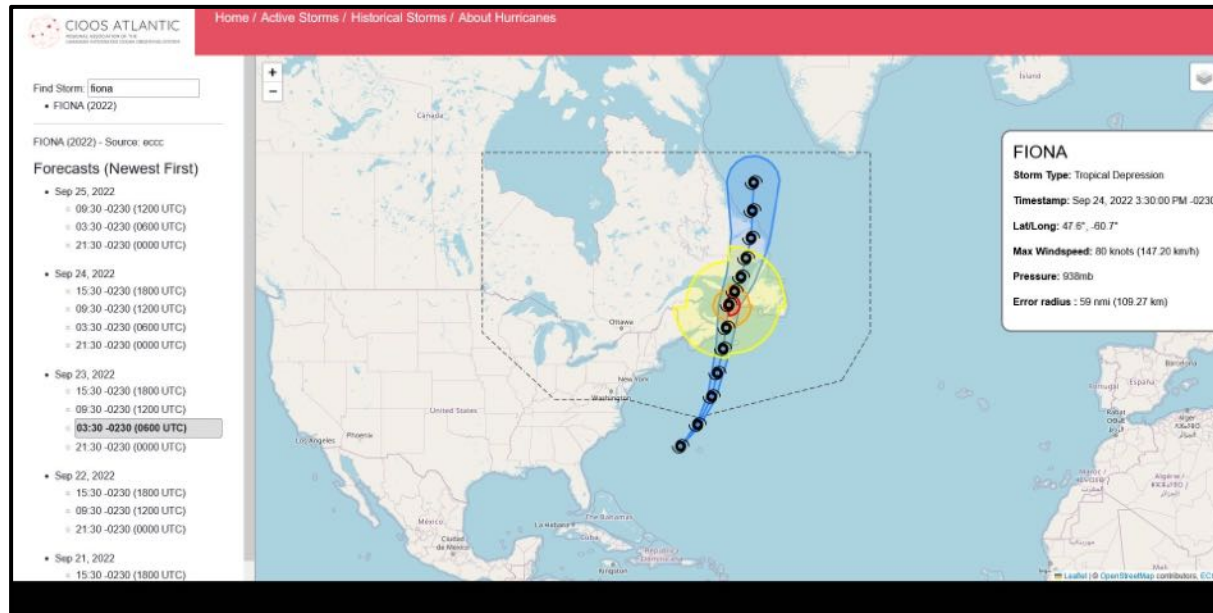
Integrating GLOS data into
the CIOOS Data Explorer
was easy!



© SLGO, Québec

Regional Tools and Information Services

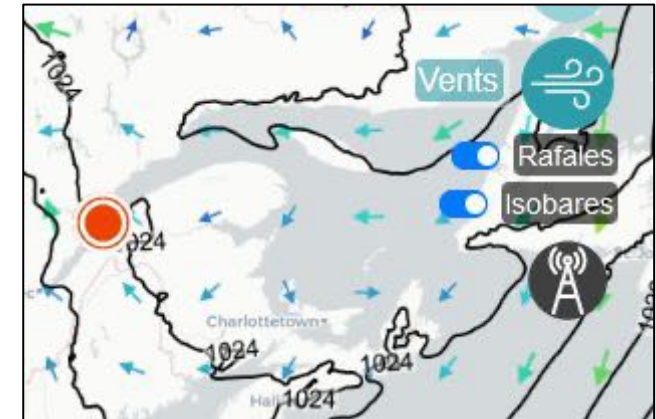
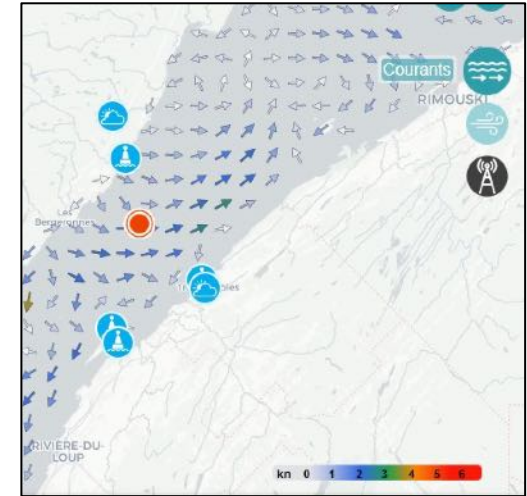
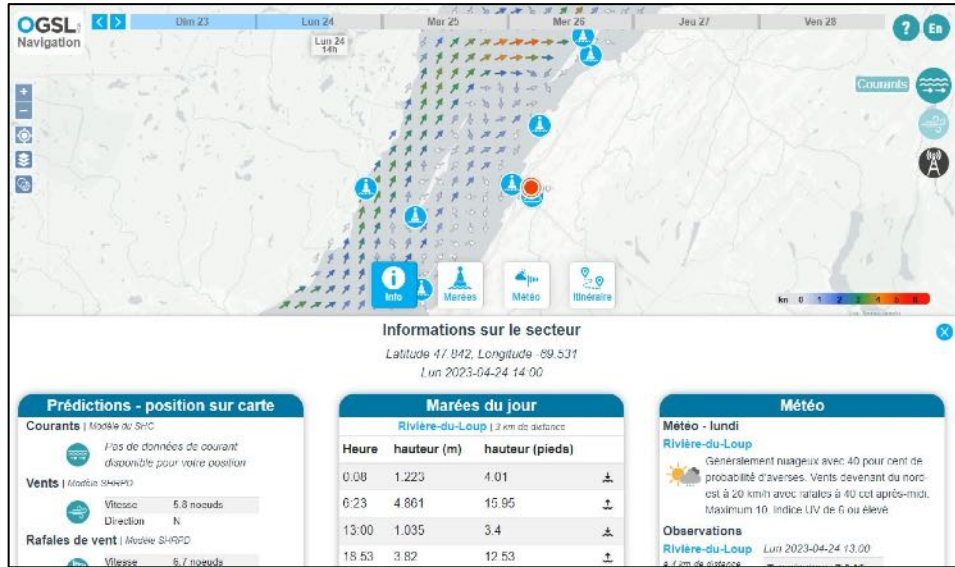
Tools and Information Services - Highlights (Atlantic)



CIOOS Atlantic Hurricane Dashboard

- Provides historical storm details
- Will include near-realtime data and model predictions from ECCC models
- Currently under development
- Talk to Scott for more details

Tools and Information Services - Highlights (SLGO)



SLGO **Navigation** App

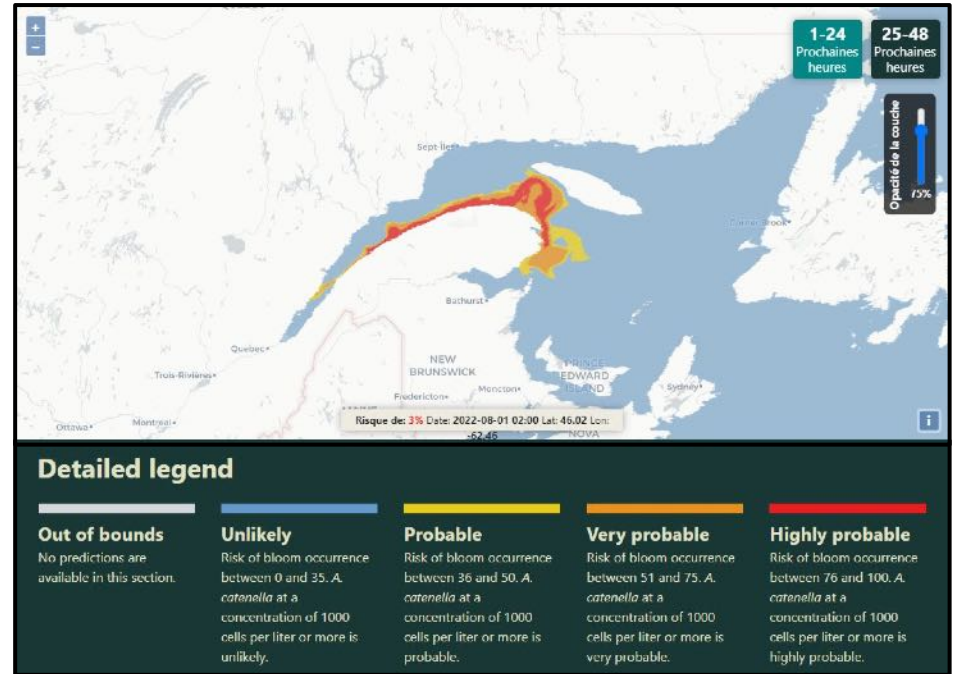
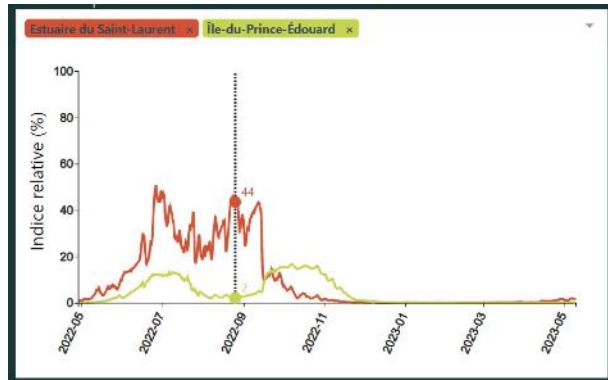
- Deployed in 2022, the Navigation application is a boating aid tool on the St. Lawrence.
- Displays current data, wind data, weather forecasts and tide data.

Tools and Information Services - Highlights (SLGO)

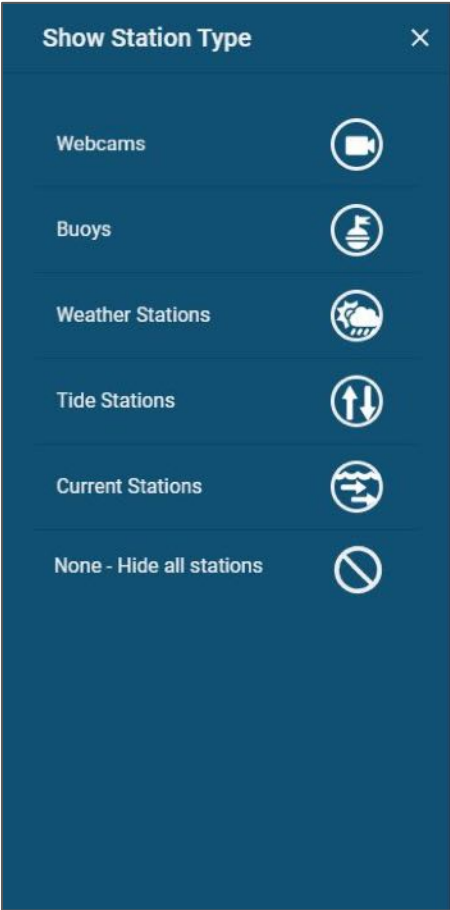
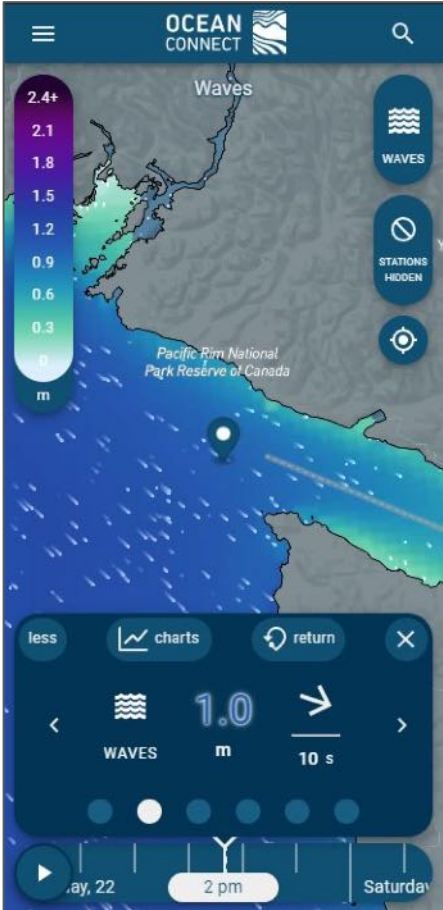
HAB monitoring

- Monitored the risk of *A.Catenella* bloom, a toxic algae which causes neurological damage in many species such as fishes, birds and mammals including humans.
- Empirical model developed by the DFO (IML)

Historical data by regions:



Tools and Information Services - Highlights (Pacific)





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Looking Forward



Key Areas of Focus - Technical

- Continued development of our national and regional tools
- Integration with global data catalogues
- Model data integration
- AI



CIOOS

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OCEAN OBSERVING SYSTEM

This project would not be possible without the financial support and the continued involvement of these organizations :



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Tula
TULA FOUNDATION



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