



CIOOS

CANADIAN INTEGRATED
OCEAN OBSERVING SYSTEM

On collaboration & next steps in CIOOS

Mike Smit

Professor, Dalhousie University

Co-chair, CIOOS Technical Committee

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Funded by :



Fisheries and Oceans
Canada

Pêches et Océans
Canada



SIOOC
SYSTÈME INTÉGRÉ D'OBSERVATION
DES OCÉANS DU CANADA

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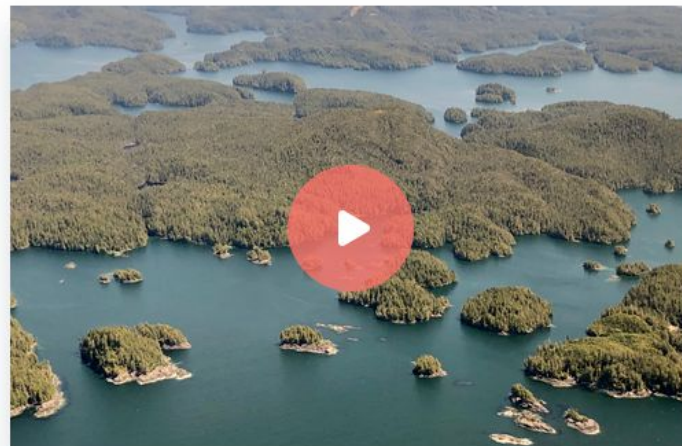
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CIOOS brings together all of Canada's coastal and ocean data.

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Want to learn more about CIOOS? [Click here >](#)



CIOOS works across the nation and across sectors to unite the knowledge, expertise, and infrastructure of Canada's ocean observing community



CIOOS Data Catalogue

Search, find, download — all of our **1532** datasets.

SEARCH BY KEYWORD

E.g. temperature



SEARCH BY OCEAN VARIABLE

Biogeochemical



Inorganic Car-
bon **55**



Silicate **10**



Oxygen **44**



Dissolved Or-
gan... **8**



Nutrients **11**



Nitrate **12**



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Collaborative Development

Throwback to previous DMAC meeting

Technical Committee

- ✓ Provides oversight and coordination of all the technical aspects of the CIOOS pilot project.
- ✓ Initiates, coordinates and monitors all Task Teams with specific mandates and deliverables.
- ✓ Acts as the liaison between the Executive Committee (ExCom) and CIOOS technical community.

Task Teams

Metadata
Standards and
Practices

Solution
Architecture

User Experience

Data Visualization

Data Management
Plan



Collaborative Development Teams

Data Integration

TBD

Metadata
catalogue

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Collaborative Development Teams

Data Integration

Website

Metadata
catalogue

Metadata entry



Collaborative Development

- Less talk, more doing
- One member per RA and DSN
 - Selection of projects of general / national interest
- Week-long code sprints
- Task chosen to be complete-able in that time
- Short stand-up meetings each day
- We now use them widely and routinely



CIOOS PACIFIC

REGIONAL ASSOCIATION OF THE
CANADIAN INTEGRATED OCEAN OBSERVING SYSTEM

[START](#)[DATA
IDENTIFICATION](#)[SPATIAL](#)[CONTACT](#)[RESOURCES](#)

Salish Sea NEMO Model Grid, Geo-location and Bathymetry

Last edited 4 months ago.

What is the spatial extent of the dataset?

You can draw a bounding box or polygon for the dataset using the Polygon or Box buttons at the left side of the map. Either a bounding box or a Polygon is required.





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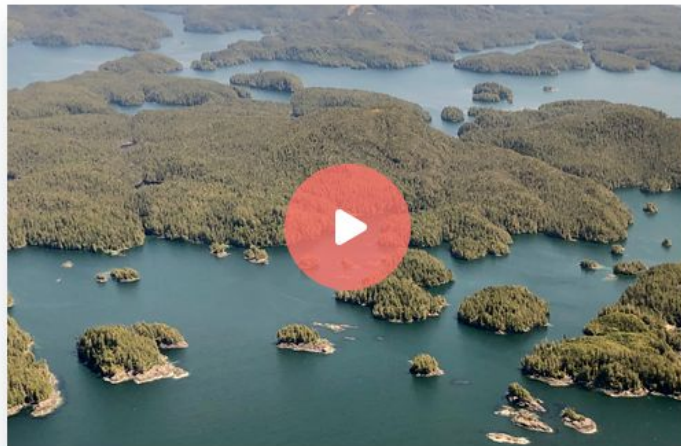
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 **dockerhub**

Explore Repositories Organizations Get Help jeffcullis

Explore cioos/ckan

cioos/ckan ☆

By cioos • Updated 12 days ago

Container

Overview Tags

latest

Sort by Newest

docker pull cioos/ckan:latest

TAG latest
Last pushed 20 days ago by fostermh

DIGEST 8ca6c870c42a

OS/ARCH linux/amd64

COMPRESSED SIZE 596.04 MB

Search or jump to... Pull requests Issues Marketplace Explore

cioos-siooc / ckan
forked from ckan/ckan

Code Issues 21 Pull requests 3 Actions Projects 1 Security Insights

XAN Dev Sprints
Updated 22 days ago

7 To do

- How to represent associated resources in CKAN
#108 opened by fostermh
help wanted
- citation not populated by all authors
#106 opened by fostermh
help wanted

2 In progress

- Test spatial harvest of national CKAN into CIOOS Atlantic CKAN
#73 opened by jeffcullis
- Test harvesting of metadata form xml
#69 opened by fostermh

3 Review in progress

- Merge RA and National bug fixes back into core cioos code base
#21 opened by fostermh
- Limit Container CPU usage
#86 opened by fostermh
Review required

0 Reviewer approved

39 Done

- Point extent error during harvest
#31 opened by fostermh
1 linked pull request
- review resource-locator field in spatial harvester
#61 opened by fostermh
1 linked pull request

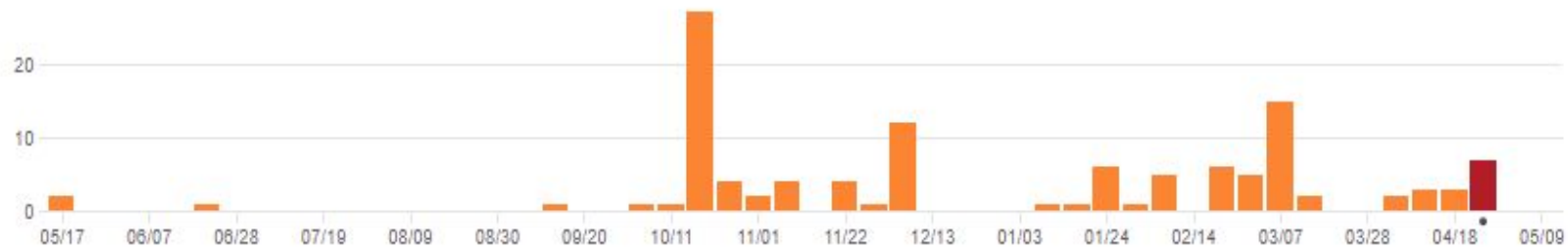
- Architecture: improved understanding / communication
- Metadata form interoperability
- Better deployment procedures
- Styling and RA-specific customizations

Team Members

	Metadata form	Data Integration	CKAN	Web
Nate Rosenstock				
Matt Foster				
Pramod Thupaki				
Jessy Barrette				
Joel Friesen				
Steve Van Der Valk				
Mac Button				
Germain Sauvé				
Julien Naumann				
Étienne Caxard				
Pauline Chauvet				
James Caveen				
Pascal Guillot				
Jacob Thompson				
Scott Bruce				
Jeff Cullis				
Odum Idika				

Atlantic	
Pacific/DSN	
SLGO	
UQAR	

CKAN



Metadata Form





Collaborative Development

- Knowledge transfer
 - Resilience, sustainability of knowledge
- Builds contributors / maintainers, not users / adopters
- Not a new theoretical concept
- Social connection, organization spanning
- Great for focused productivity
- Not without costs
- Best done often

And we should note...

This could span more than organizational boundaries...



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Looking Forward



Key Areas of Focus - CIOOS

- Strengthening partnerships for improved ocean observations and service delivery.
- Improving the discoverability, accessibility and interoperability of Canadian Oceanographic Data.
- Converting ocean data into information and knowledge through the development and use of tools, products and applications.
- Increasing the ability to understand current states and predict future states of Canada's three oceans by supporting and sharing modelling, hindcasting and forecasting outputs.



Key Areas of Focus - Tech Comm

- New website theme development and roll-out
- Common vocabularies, keywords, and emerging EOVs; basic data quality control; data versioning; DOIs and data citation
- Next gen asset map
- CIOOS data access API
- Biological, modelled, and real-time data
- Less public data
- Continued data ingestion

VITALITY

LEVERAGING CIOOS TO ACCELERATE THE OCEAN SECTOR

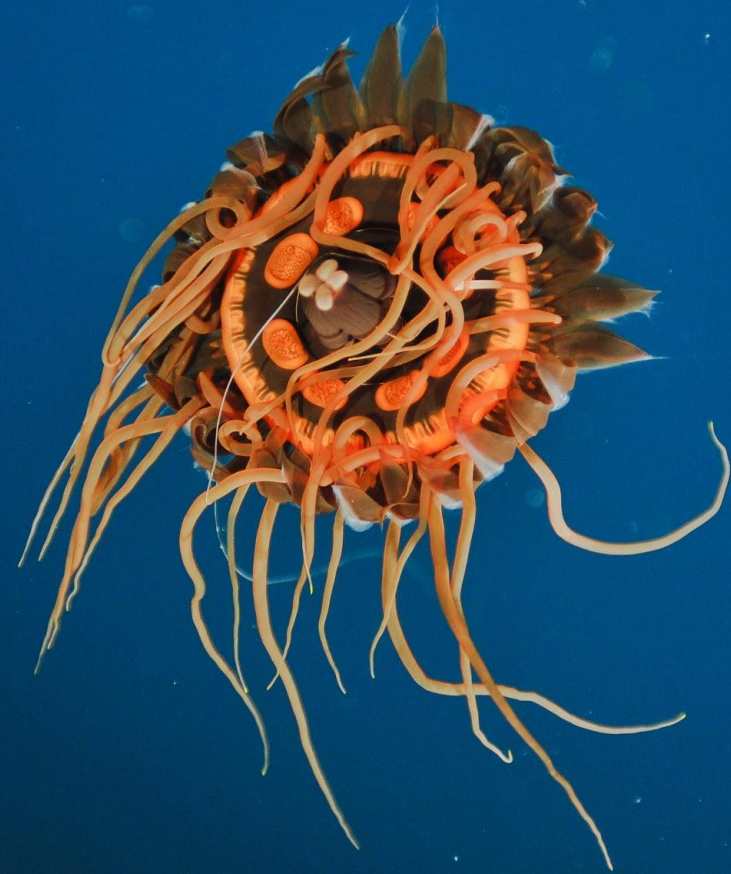


VITALITY will capitalize on Canada's ocean data to deliver definitive commercial outcomes to the businesses involved and support the resolution of near-term labour, skill and capability by developing much-needed training programs. VITALITY is a collaboration of 10 partners across Canada, including companies, industry associations, research institutions, and non-profits. VITALITY is here to help you as an ocean business, ocean community, or as an ocean sector worker.



What Keeps Me Up at Night

- Sustained funding
- Significant observation gaps
- Meaningful inclusion of Arctic
- Demand for more complicated data
- The challenge in communicating our value and necessity



Thank You



cioos.ca | siooc.ca



info@cioos.ca



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