

Data Management and Building Community in a Global Synthesis of Under-Ice Productivity

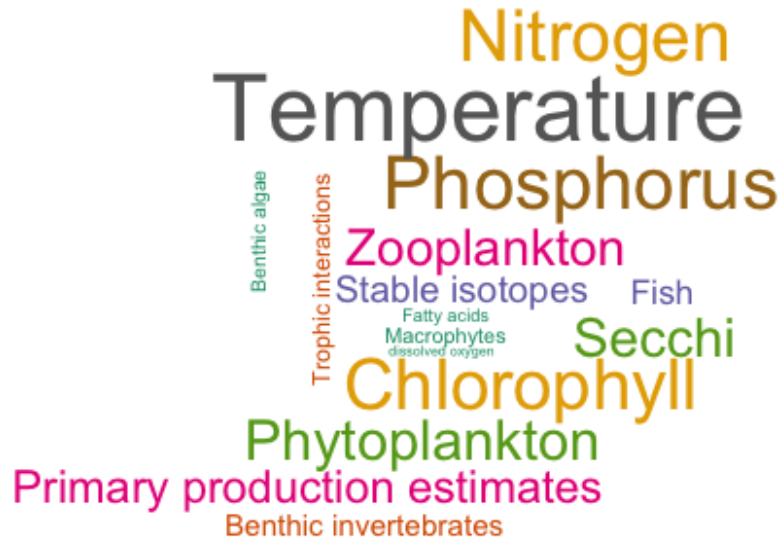
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Washington State University | @kara_woo
IAGLR 2015, Burlington, VT

What goes on under ice in lakes?



Just how broad is interest in under ice ecology?

>100 survey responses, >80 with data on:



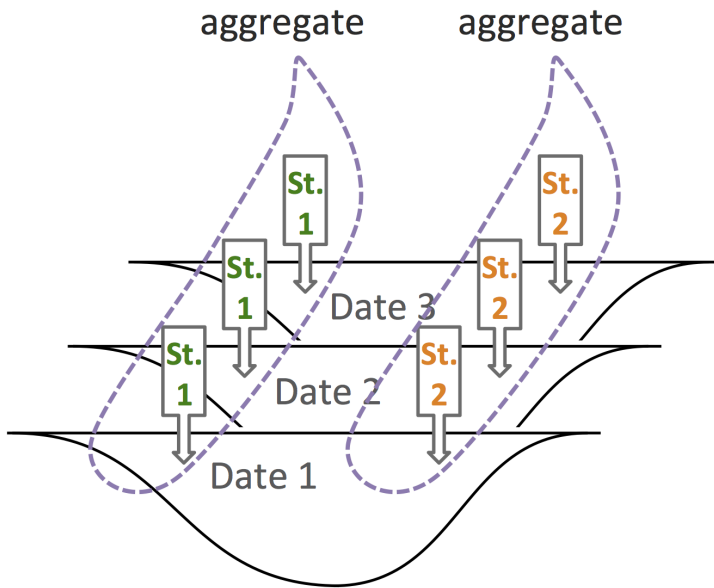
Challenges for synthesis

1. Managing communications
2. Integrating heterogeneous data
3. Building a sense of community
4. Incentives

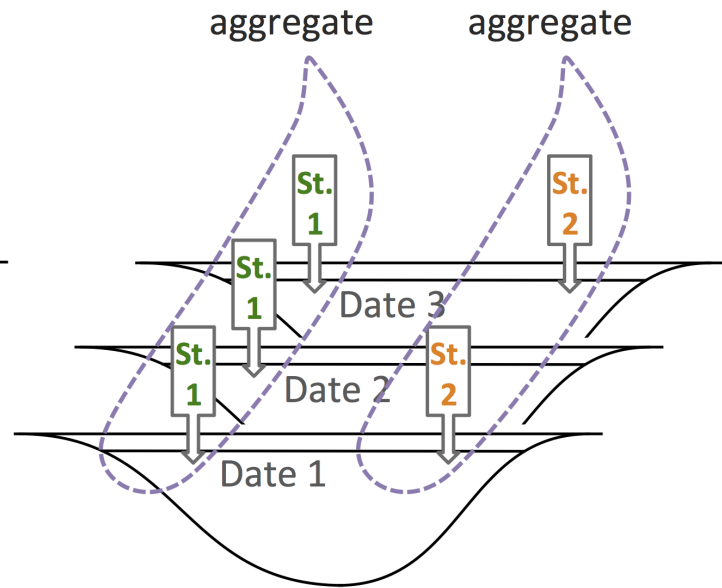
Data Template

Goals

1. Integrate data as seamlessly as possible
2. Encourage sharing
3. Use researchers' system-specific knowledge



ice-free



ice-on

Policies

Document describing how data will be used and shared

Internally to collaborators first, then eventually public


Policies shared early and often

Validate Data

R package **icetest**

<https://github.com/karawoo/icetest>

 karawoo / icetest

 Unwatch 1

 Star 1

 Fork 0


QA/QC for under-ice ecology synthesis data — Edit

 109 commits

 2 branches

 0 releases


 1 contributor







 branch: master **icetest / +**




Merge branch 'master' of github.com:karawoo/icetest

 karawoo authored 6 days ago

latest commit a655af2a25 

 R	remove mu symbol from documentation	8 days ago
 data-raw	make the list of valid field names available	3 months ago
 data	make the list of valid field names available	3 months ago
 man	remove mu symbol from documentation	8 days ago
 tests	add function to check nitrogen values, #29	16 days ago
 .Rbuildignore	add sample script for checking a data file	5 months ago

<> Code

 Issues 3

 Pull requests 0

 Wiki

 Pulse

 Graphs

 Settings

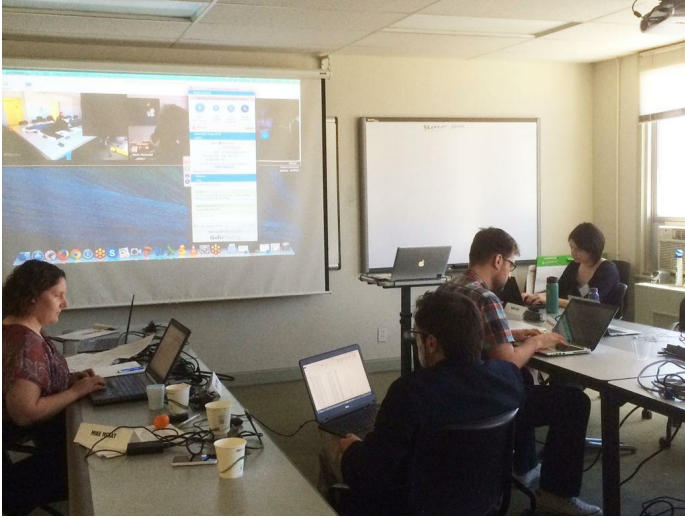
SSH clone URL

git@github.com:karawoo/icetest

Lots of Email

The Fun Part

Workshop at NCEAS



Collaborative website

[Home](#) [My page](#) [Projects](#) [Administration](#) [Help](#)

Logged in as **woo** [My account](#) [Sign out](#)

Core Under Ice Ecology Work

Search: [Core Under Ice Ecology Work](#)

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Overview

Where you'll find core documents, protocols, analysis, and other materials relating to the initial group manuscript.

Helpful links

- [Logistics](#)
- [Projects underway](#)
- [Propose a project](#) - see [here](#) for an example
- [Data](#)

Issue tracking

- Proposed project:** 2 open / 2
- Project underway:** 1 open / 1
- Task:** 4 open / 4
- Other:** 8 open / 8
- Code:** 6 open / 6
- Breakout groups:** 8 open / 8
- Pull request:** 0 open / 0

[View all issues](#)

[New subproject](#) [Close](#)

Members

Manager: [Aaron Galloway](#), [Kara Woo](#), [Stephanie Hampton](#)

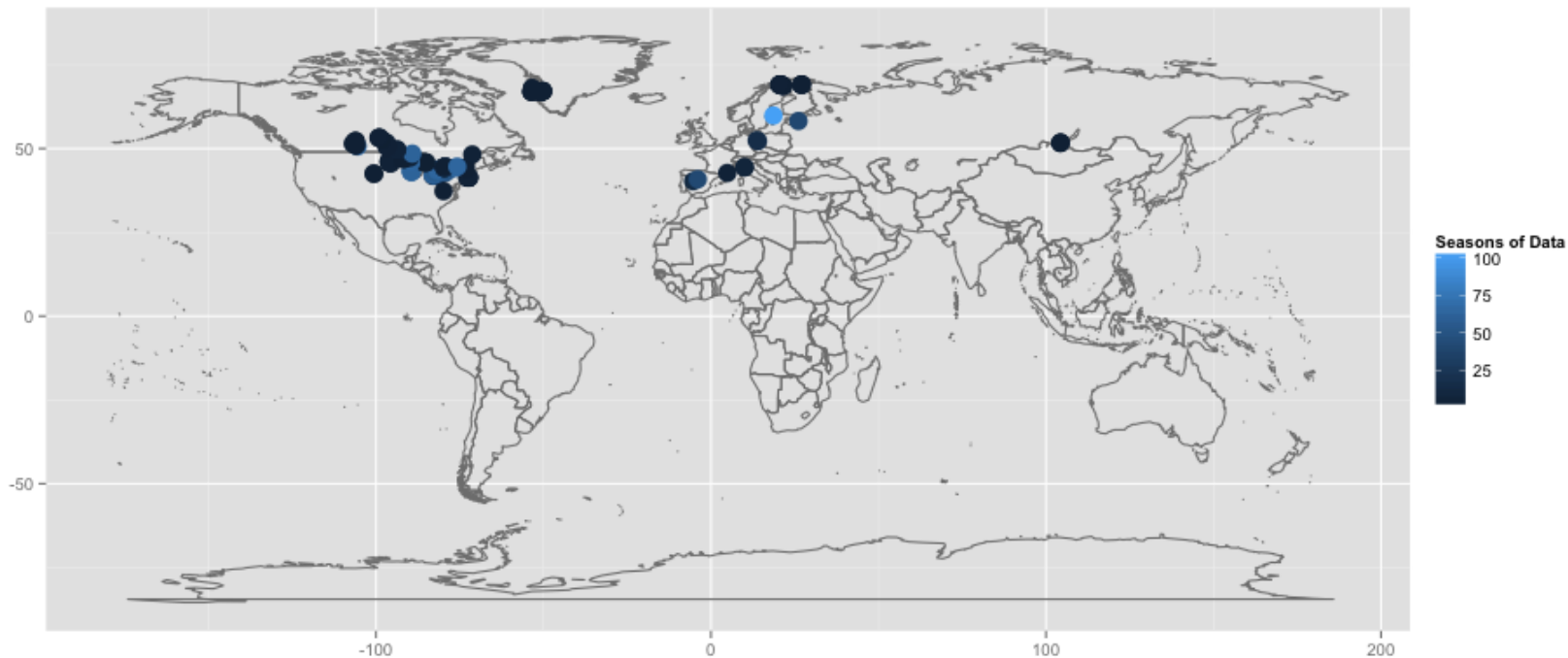
Participant: [Anson Mackay](#), [Catherine O'Reilly](#), [Corinna Gries](#), [Deniz Özkundakci](#), [Emily Stanley](#), [Enn Kaup](#), [Erika Whiteford](#), [George Swann](#), [Gesa Weyhenmeyer](#), [Heather Mariash](#), [Helen Baulch](#), [Ignacio Granados](#), [Isabella Bertani](#), [Jacqueline Ruecker](#), [Jason Stockwell](#), [Jim Rusak](#), [Jordan read](#), [Jordi Catalan](#), [Kimmo Kahilainen](#), [Klaus Joehnk](#), [Lauri Arvola](#), [Leah Domine](#), [Lluís Camarero](#), [Manuel Toro](#), [Marisol Felip](#), [Matthew Pruett](#), [Michelle Palmer](#), [Mike McKay](#), [Milla Rautio](#), [Noah Lottig](#), [Rebecca North](#), [Rita Adrian](#), [Ryan Batt](#), [Sally MacIntyre](#), [Sapna Sharma](#), [Sarah Roberts](#), [Sudeep Chandra](#), [Suzanne McGowan](#), [Ted Ozersky](#), [Tiina Peeter Noges](#), [William Colom-Montero](#)

Spent time

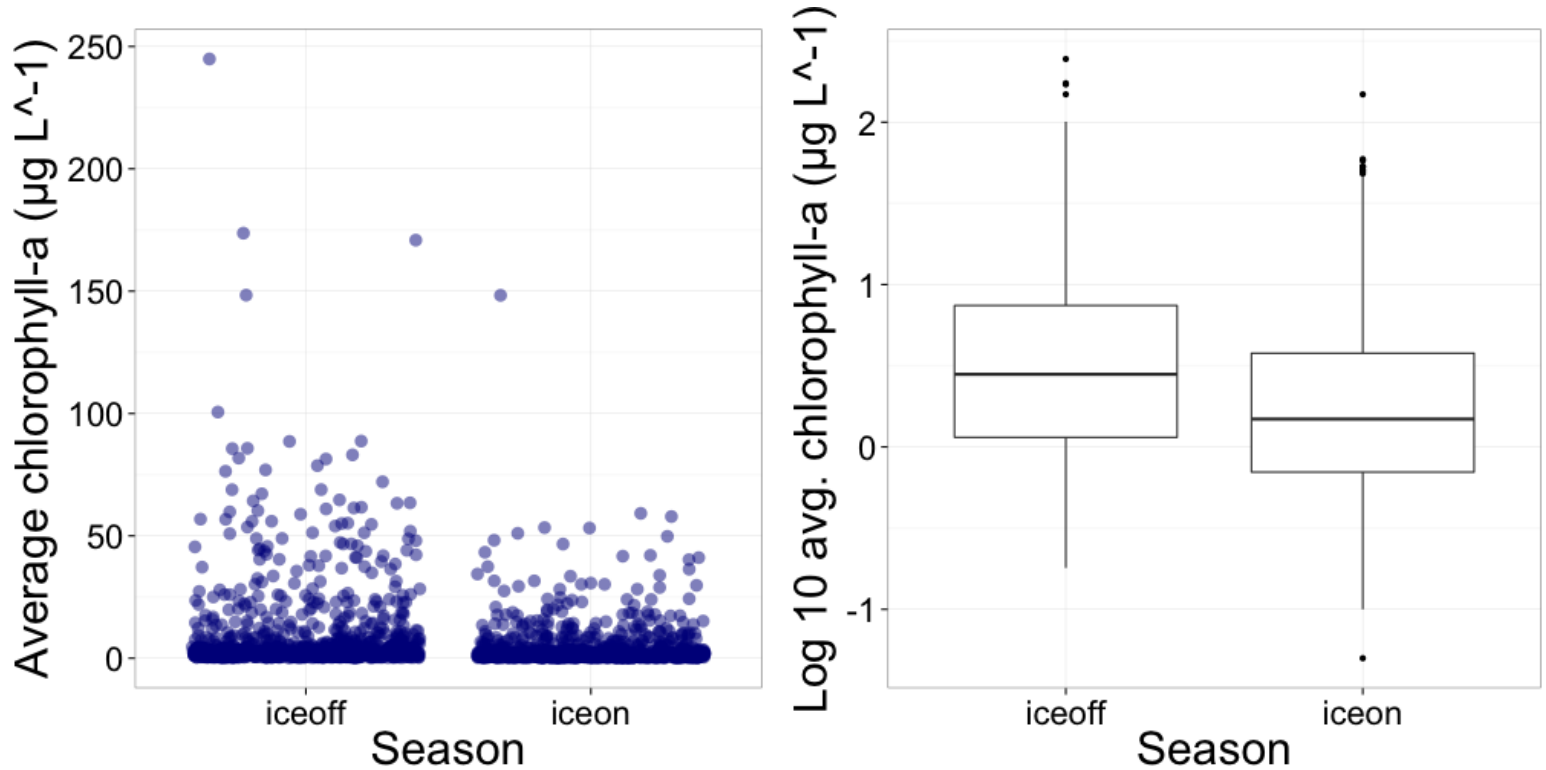
0.00 hour

[Log time](#) | [Details](#) | [Report](#)

86 lakes represented (so far)



Ice-off vs. ice-on chlorophyll-a



Conclusions

**Managing
communications**

**Integrating
heterogeneous
data**

**Building
community**

Incentives

- Be responsive
- Centralize communication
- Plan ahead
- Validate the data
- Be inclusive
- Communicate expectations early and often

Acknowledgements

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Undergraduate researcher: Matthew Pruett

National Center for Ecological Analysis and Synthesis