

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

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# What goes on under ice in lakes?



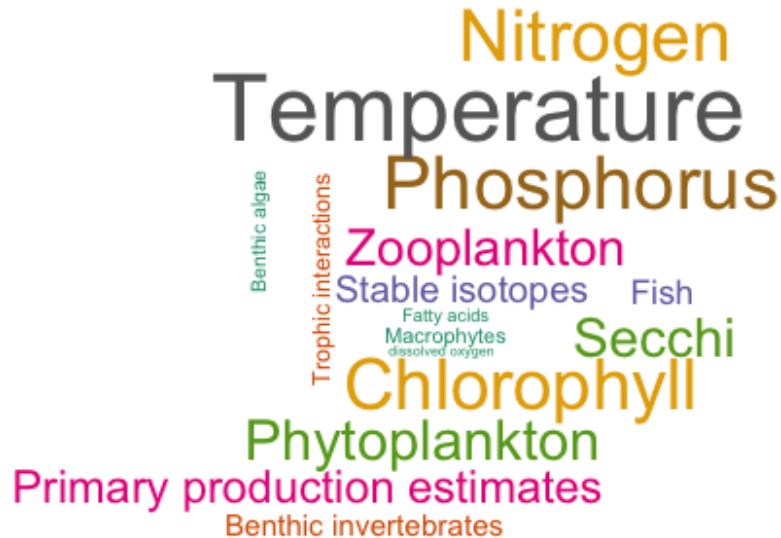
# Challenges for synthesis

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



# Step 1: Gauging Interest

>100 survey responses, >80 with data on:

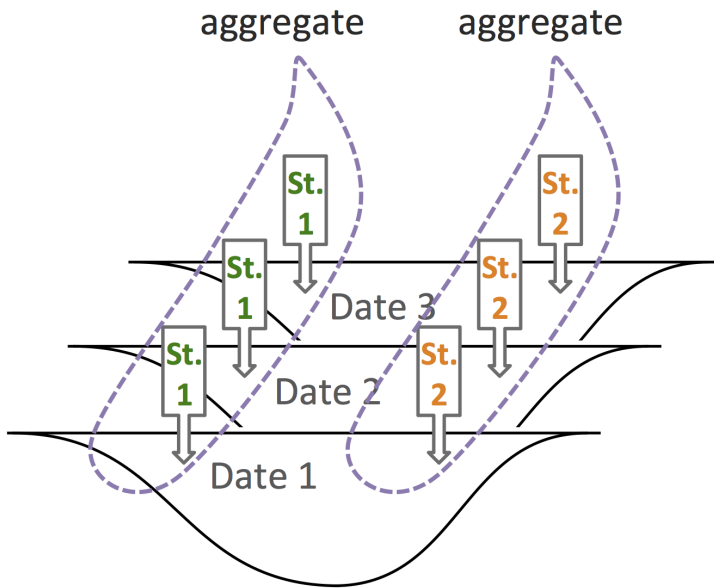


## Step 2: Data Template

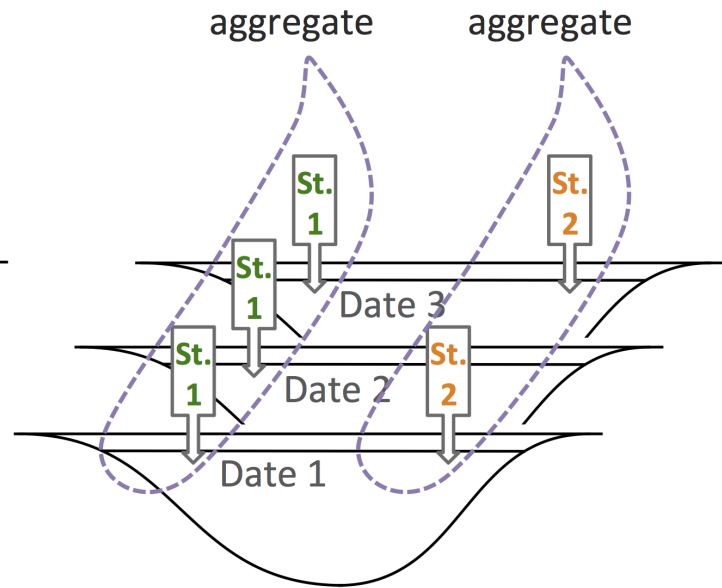


# Goals

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

## **Step 3: 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

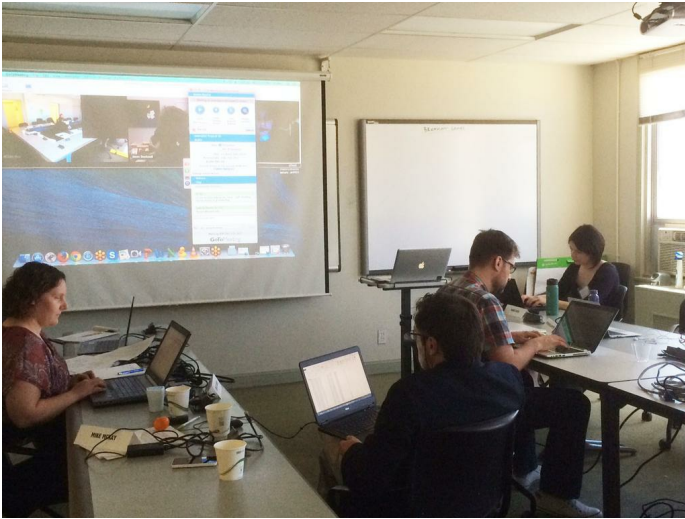
SSH clone URL

git@github.com:karawoo/icetest

## **Step 4: Lots of Email**

# Step 5: 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](#)

[Overview](#) [Activity](#) [Issues](#) [New issue](#) [Documents](#) [Wiki](#) [Repository](#) [Settings](#)

### 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](#)

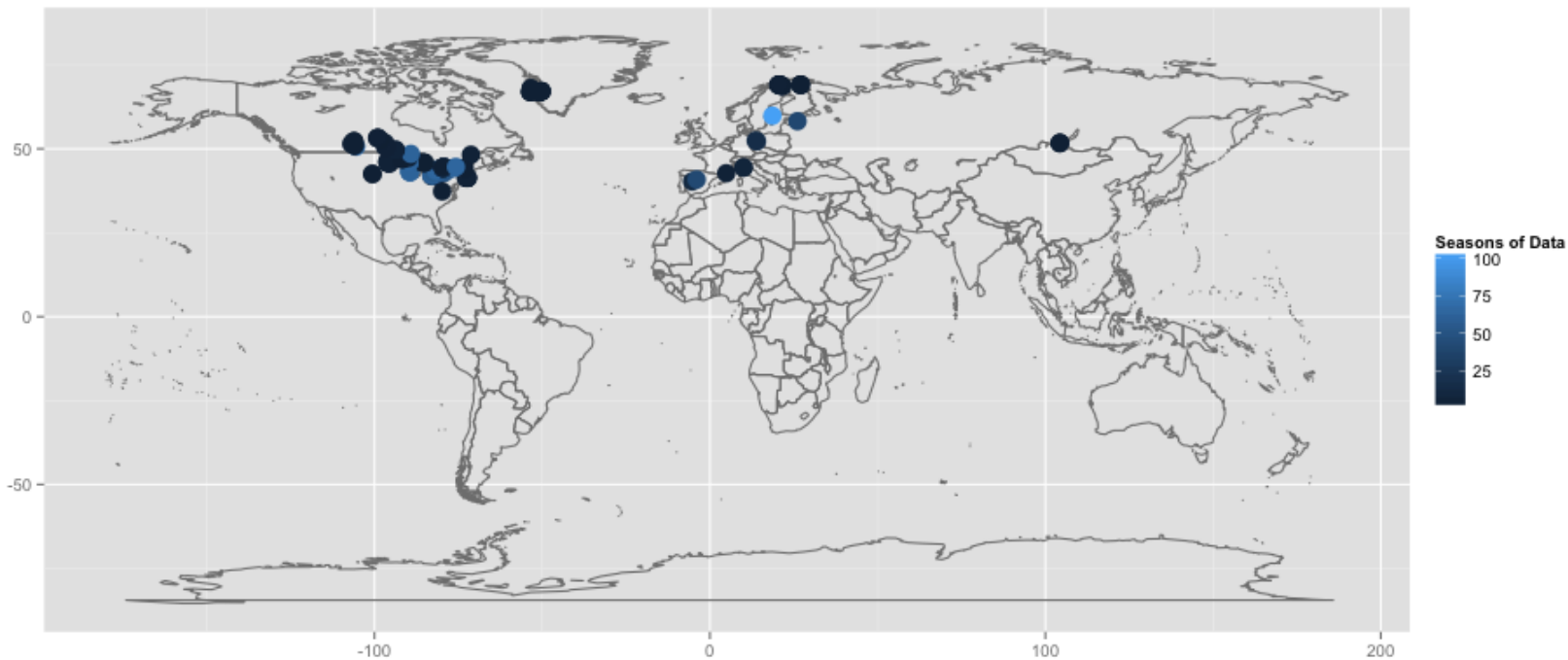
**Spent time**

0.00 hour

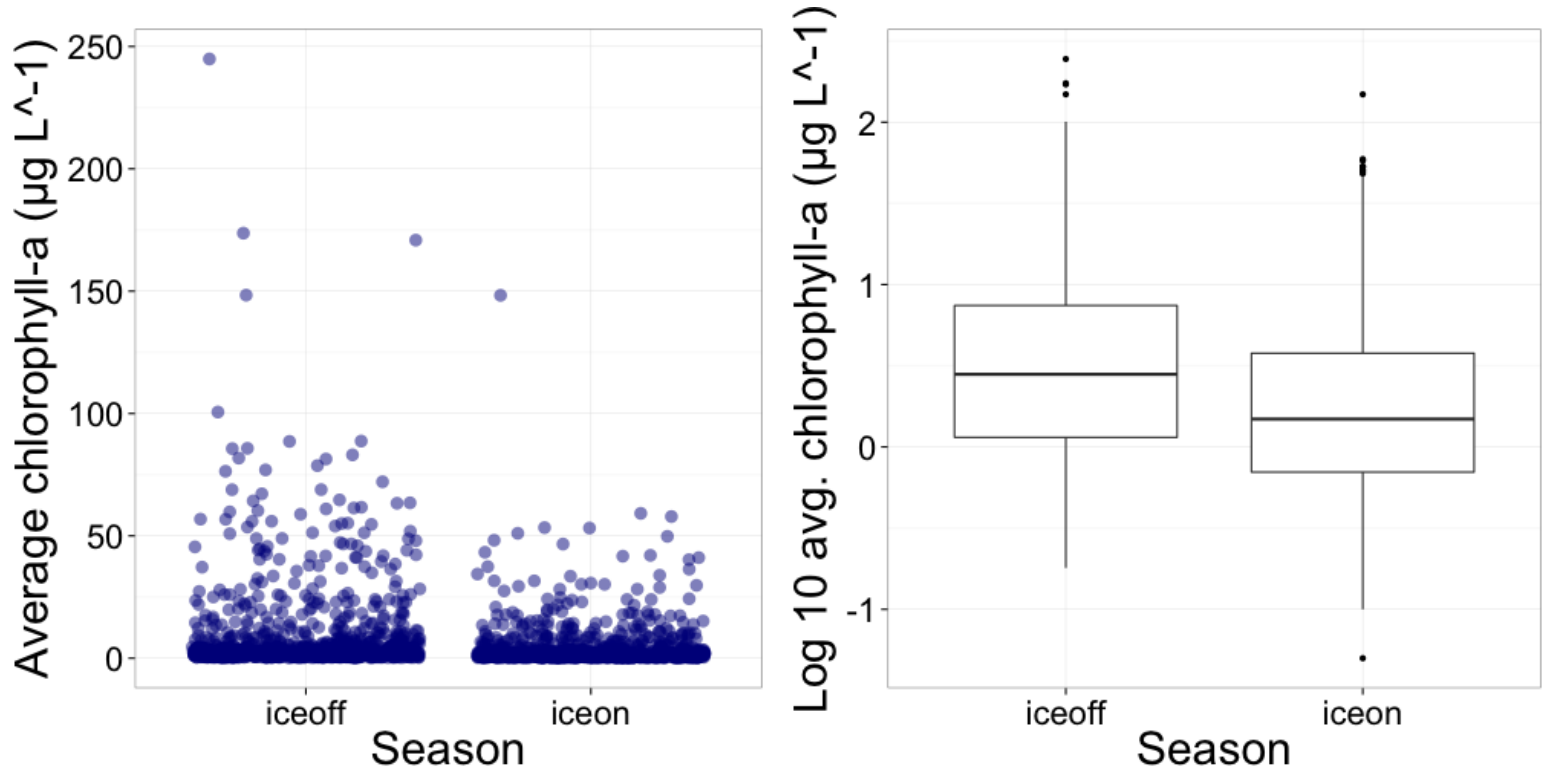
[Log time](#) | [Details](#) | [Report](#)



# 86 lakes represented (so far)



# Ice-off vs. ice-on chlorophyll-a



# Conclusions

# Managing communications

- Be responsive
- Centralize communication

# Integrating heterogeneous data

- Plan ahead
- Validate the data

# Building community

- Be inclusive
- Communicate expectations early and often

# Acknowledgements

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Ice workshop steering committee: Emily Stanley, Ted  
Ozersky, Chris Polashenski

Matthew Pruett

National Center for Ecological Analysis and Synthesis