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

Kara H. Woo, Stephanie E. Hampton, Aaron W. E. Galloway Washington State University



### What goes on under ice in lakes?



Photo: Ted Ozersky

### Challenges for synthesis

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



Photo: Ted Ozersky

## Step 1: Gauging interest

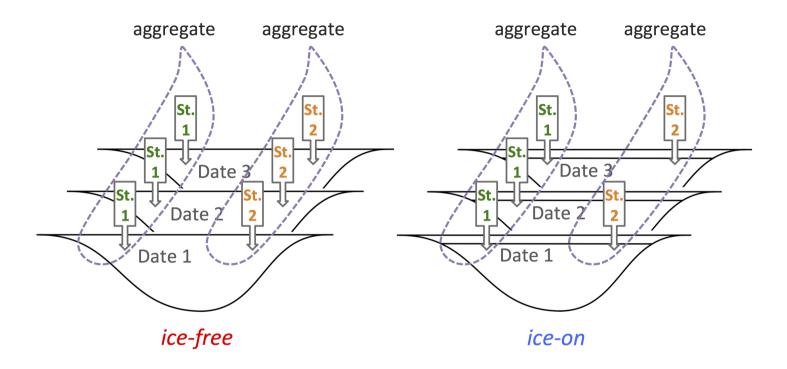
#### >100 survey responses

#### Temperature Chlorophyll Zooplankton Nitrogen Benthic invertebrates Trophic interactions Macrophytes Primary production estimates Stable isotopes Phytoplankton

# Step 2: Data Template

#### Goals

- 1. Integrate data as seamlessly as possible
- 2. Encourage sharing



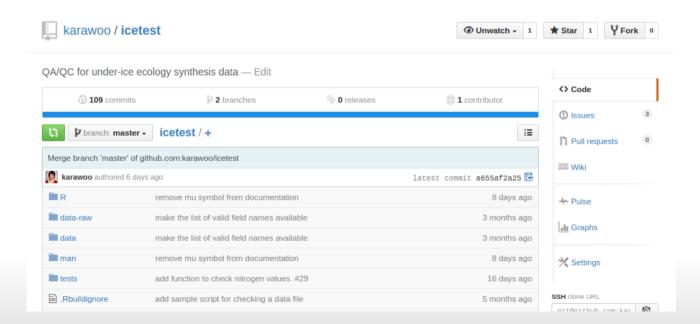
#### **Policies**

- Document describing how data would be used and shared
- Internally to project collaborators first, then eventually public

# Step 3: Validate Data

### R package icetest

https://github.com/karawoo/icetest



# Step 4: Lots of Email

# Step 5: The Fun Part

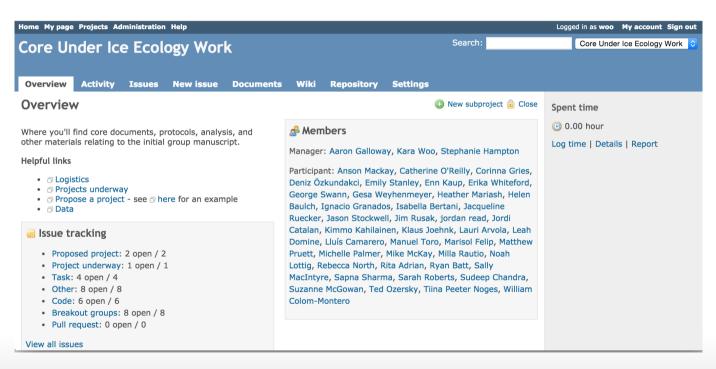
### Workshop at NCEAS

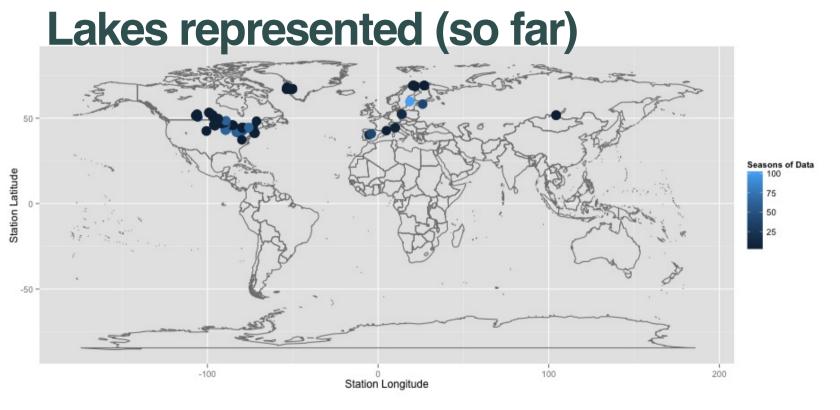




Photos: Stephanie Hampton (left), NCEAS (right)

#### **Collaborative website**





#### **Conclusions**

- · Plan ahead
- · Centralize communication
  - Email lists
  - Project website (Redmine, Open Science Framework, etc.)