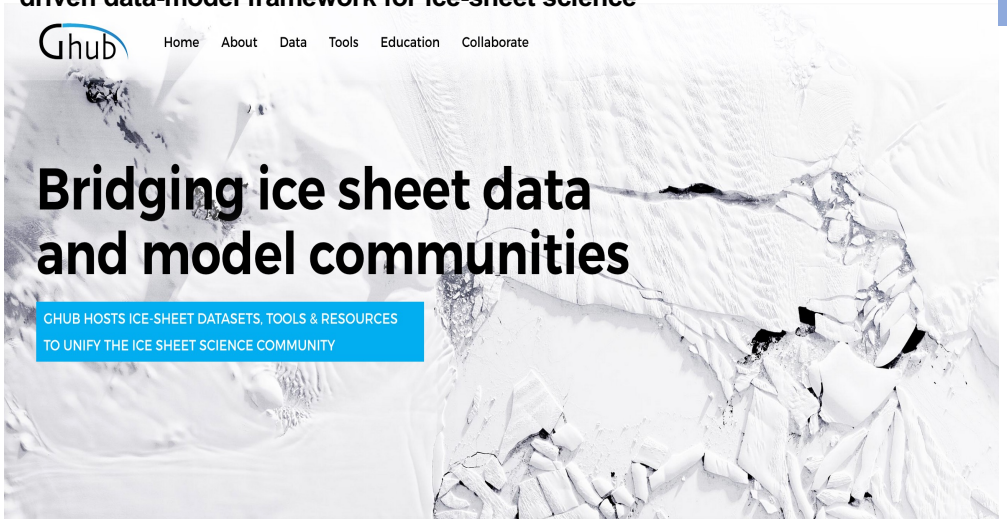
Award #: **2004302, Collaborative Research: Frameworks: Ghub as a community-driven data-model framework for ice-sheet science**



Data

Hosted ice sheet and paleoglaciology data derived from multiple sources.

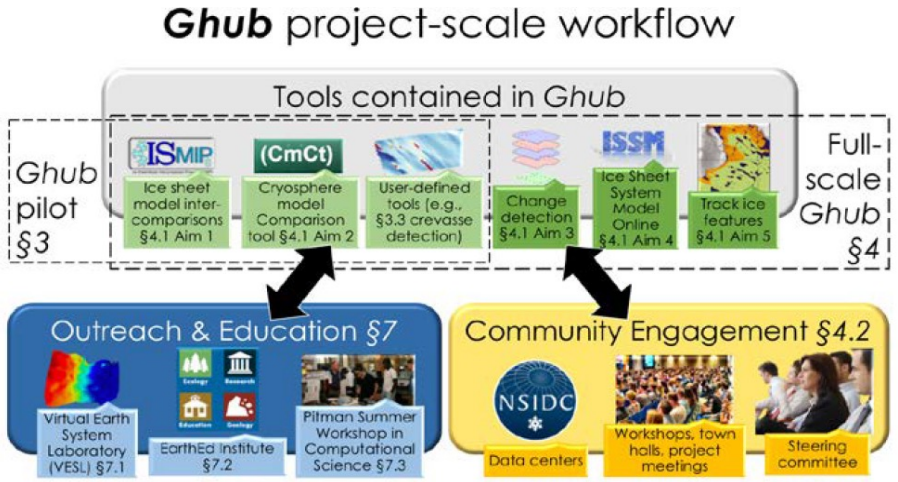
Tools

Computational tools and hosted codes help with data analysis and visualization.

Education

GHub's visualizations and high-performance computing support teaching and outreach.

What is Ghub?



Many datasets and tools made available already for sharing and online execution – Jupyter notebooks for data analysis etc.

Some Lessons

- Identify and obtain good User input from one or more focused science groups – ISMIP6 provide Ghub many useful lessons and early focus.
- Steering committee with users and partner representatives.
- Plan for staff turnover with shared responsibilities.

University at Buffalo
- **Jason Briner** (domain, ice sheet history)
- **Bea Csatho** (domain, ice sheet observation)
- **Sophie Nowicki** (domain, ice sheet modeling and synthesis)
- **Kristin Poinar** (domain, ice sheet hydrology)
- **Toni Schenk** (domain, ice sheet observation)

Tufts University
- **Abani Patra** (cyberinfrastructure, Vhub)

NCAR
- **Bill Lipscomb** (domain, ice sheet modeling)

Innovim
- **Erika Simon** (programmer, "NASA" modeling tools)

Tidbit Software
- **Justin Quinn** (programmer, viz and web-based modeling (VESL), with:

NASA-JPL
- **Eric Larour** (cryo head, ISSM)

NCAR
- **Kate Thayer-Calder** (programmer, ice sheet models in GCM)