

Summary of GLIMS Workshop 2017

Introduction

A workshop for the GLIMS (Global Land Ice Measurements from Space) initiative was held during 11-13 August, 2017, in Boulder, Colorado, USA, with the purpose of getting input from the GLIMS Core Team and the greater community on future needs and directions for GLIMS. About 12 people attended, though another dozen interested people were unable to attend due to visa problems or previous commitments.



The workshop agenda was divided into four sections: presentations, brainstorming, prioritization, and actions. The following explains each section in more detail.

Presentations

Participants were given the opportunity to present their recent work. Here are the speakers' names and talk titles.

Bruce Raup (NSIDC DAAC/CU): Global Land Measurements from Space (GLIMS): Overview and status

Frank Paul (U. Zurich): Summary of CCI project results. Optical (velocities, outlines), DEMs, etc. Jeff suggested using the same base image in Frank's loops, clipping out glaciers and overlaying them on the same base image.

Liss Andreassen (NVE, Norway): The International Association of Cryospheric Sciences

Liss Andreassen (NVE, Norway): Status of GLIMS work NVE, Norway

Frank Paul (U. Zurich): Overview of the Copernicus Climate Change Service

example, creation of a GLIMS Bulletin), take on new data types, website and web service improvements, updating technical documentation, quality control, and the like.

Prioritization

After issues were identified, participants were each given four round stickers (dots) that they stuck to the issues or categories most important to them -- a process known as dot-voting. The issues that rose to the top of the priority list are:

- Public communication and the need for a GLIMS Bulletin
- Improving the technical documentation for data providers, which includes refining the definition of “glacier” and moving toward the inclusion of rock glaciers in GLIMS, and
- How to better provide other data types, such as snow lines and center lines, and to improve their representation in the online map applications.

Actions

The participants broke into Action Groups, each tasked with taking the first concrete steps on the identified issue. The results of these are:

Public communication and GLIMS Bulletin

Group members: Liss Andreassen, Jeff Kargel, Bruce Raup

The major outcome of this Action Group was a detailed outline of the new GLIMS Bulletin. The Bulletin will be published annually, beginning spring of 2018. It will include sections on GLIMS background information and news, database statistics, recent meetings and workshops, other notable community activity, a story highlighting some GLIMS-related research, and a list of references. There will also be an explicit call for data contributions to GLIMS.

Together with the Bulletin, a snapshot of the GLIMS Glacier Database contents will be created and posted on the GLIMS website. Each annual static snapshot will remain available into the future and be citable in the literature.

A timeline for the production of Issue #1 was established. The target date for publication is 30 April, 2018, with a deadline for data submissions to be included in the associated snapshot of 15 February.

Technical Documentation

Group members: Tobias Bolch, Lin Liu, Frank Paul, Oliver Wigmore

This action group took the first steps in rewriting the GLIMS Analysis Tutorial (GAT), a technical document that has guided the mapping of glaciers for GLIMS since its inception. Mapping approaches and software have changed considerably since those early days, leaving the document obsolete in many places. The new GAT will better describe the process of mapping glaciers from satellite imagery and will more accurately list the requirements for data submission.

Improving the website and provision of data through web applications

Group members: Joaquin Belart, Zhixing Ruan, Solveig Winsvold, (Bruce Raup)

Due to the vicissitudes of financial support for GLIMS, keeping the website up to date has often taken a back seat to data ingest and other technical developments. A start to updating the home page was taken during the workshop, hack-a-thon style. Many additional recommendations were documented and will be prioritized in the coming year. Improvements include: remove obsolete text, simplify the website structure, better document what data are available, expand the download service to include all types of GLIMS data, and so on. The interactive map application will be improved by: allowing the user to turn on/off individual elements of GLIMS data, improving map symbology, adding a time slider to allow better control of multi-temporal data, and so on. Although new data types are welcome and can be added, the main priority of GLIMS is to store multi-temporal glacier outlines.

In Closing

While circumstances ended up limiting attendance numbers, the workshop was extremely productive in not only identifying important issues facing GLIMS, but also in making significant progress on them. We sincerely thank all the attendees, as well as those who contributed remotely. We encourage readers to send any further suggestions to NSIDC User Services, at nsidc@nsidc.org.



Many of us ended the weekend with a rainy hike in the Indian Peaks Wilderness, west of Boulder, and were rewarded with a close sighting of a moose (photo: Zhixing Ruan).