

GlacierMIP Annual Meeting

Wednesday, 12 February 2025, 13:00 - 15:00 CET, Toppsenteret, University of Oslo

<https://climate-cryosphere.org/glaciermip/>

Participants

In person (28): Regine Hock, Fabien Maussion, David Rounce, Lilian Schuster, Ruitang Yang, Harry Zekollari, Yeliz Yilmaz, Beatriz Recinos, Ben Marzeion, Weilin Yang, Miriam Jackson, Henning Åkesson, Kristoffer Aalstad, Gregoire Guillet, Satu Innanen, Oskar Herrmann, Johannes Brunner, Samuel Cook, Patrik Schmitt, Lizz Ultee, Lander Van Tricht, Celine Walker, Johannes Fürst, Takoro Imazu, Thomas Frank, Pragay Shourya Moudgil, Christina Draeger, Inger Bij de Vaate

On zoom (1): Nicolas Champollion

1) Introduction

A brief overview was given on GlacierMIP activities and its history (RH). It was highlighted that GlacierMIP started 10-years ago.

2) GlacierMIP3 update

- a) HZ informed that a paper on GlacierMIP3 (equilibrium experiments) is currently in review with *Science*.
- b) Actions for dissemination (press release, ...) will be discussed when the paper is accepted.
- c) Publication of further analyses of GlacierMIP3 data with focus on model differences in response times and sensitivity was discussed but no decision taken.
- d) Any GlacierMIP participants presenting GlacierMIP results at conference were requested to provide details (which conference, when, where, title ...) to GlacierMIP leadership for inclusion in annual reports.

3) Continuation of GlacierMIP

Several suggestions for a next GlacierMIP phase were put forward:

- a) Community projections for IPCC AR7 using CMIP7 climate forcing
 - b) Analyses of differences in results between different global models through comparison of mass-balance components (acc, melt, runoff, refreezing, frontal ablation) among models. LS also suggested to look at different variants of the same glacier model.
 - c) Develop protocol for standardization of model output including type of variables, names, format, etc, similar as done in ISMIP; publication as technical paper
 - d) Sensitivity of simulations to choice of climate re-analyses in model calibration
 - e) Past reconstructions of glacier change
 - f) Detection & attribution experiment
- It was decided to focus on activities (a-d). A key goal will be to provide community projections for next IPCC report (AR7); this focus was also considered most realistic with limited resources.
 - DR and FM indicated interest in leading activity (d) and RH in activities (a-b). A chair for activity (c) will need to be identified.
 - Option (e) and (f) were considered too difficult and complex to do properly at this point. For (f) simulations of the entire industrial period would be needed.

- Option (c) will also include guidance on spatial scales (e.g. regional, drainage basins, and possible per-glacier) and formats. DR: Output should also include model-specific local temperature/precipitation.
- **Protocols** for the planned activities of the next phase will be developed during the course of 2025.
- RH suggested a GlacierMIP community **review paper** on global glacier modeling also drawing on the discussions at the workshop, in particular during break-out groups. Details will be defined shortly.

4) Coordination with ISMIP

It was emphasized to maintain strong and consistent communication with ISMIP and its related activities. LU volunteered to be our “contact” point with ISMIP (she is in the Greenland working group).

5) Leadership

BM resigned as co-chair after 10 years of co-leadership. RH and HZ will continue as chairs.

6) Other issues

a. Relevant information from other international activities (RGI 7.0, ...)

RGI 7 has been released in fall 2023. The RGI working group is currently working on adding attributes to the glacier outlines, and a new version RGI7.1 will be released in 2025. The outlines will not change regardless remaining errors.

b. Diversifying participation

Almost all GlacierMIP modeling groups are based in Europe or North America. Strategies how to diversify participation were discussed. We encourage participation from other part countries. FM: We should de-emphasize the models but instead think in terms of people that use the models since at least some models are open source and others may contribute to GlacierMIP without developing their own model.

c. Funding for GlacierMIP

It was recognized that GlacierMIP activities are funded by individual group’s national or international grants. Possibilities to receive funding directly for GlacierMIP work were discussed: BR (observation working group), LU (Greenland working group) mentioned that funding for full postdocs to support work on ISMIP (Heising-Simons Foundation, <https://www.hsfoundation.org/>) was applied for. BR will ask the “Prince of Monaco foundation” for potential GlacierMIP funding.

RH and HZ will formulate a new proposal to CliC for continuation of GlacierMIP.

7) Next GlacierMIP meeting

Several options were mentioned:

- CliC Open Science Conference (February 2026, Wellington): preferred, however, likely not many modeling groups will be able to attend given distance from bulk of global modeling groups.
- NAG (Network of Arctic Glaciology) meeting in Obergurgl, Austria, Jan 2026
- International Symposium on Artificial Intelligence in Glaciology, Dartmouth, USA (June 2026)

No decision was taken.

The minutes were taken by LS during the meeting and then compiled and edited by RH and HZ.