Minutes of the GlacierMIP meeting
at the AGU Fall Meeting 2018, Washington D.C

Thursday, December 13, 1:45-4:00 pm (local time)
Room "Duke 1" of the Cambria Hotel Washington, D.C. Convention Center (899 O Street NW)
http://www.climate-cryosphere.org/activities/targeted/glaciermip/

Participants

In person: Regine Hock, Walter Immerzeel, Philip Kraaijenbrink, Valentina Radic, David Rounce, Orie Sasaki, Megumi Watanabe, Alfonso Fernandez, Daniel Farinotti, Roderik van de Wal, Dongping Song

Telecon: Ben Marzeion, Andy Bliss, Matthias Huss, Sarah Shannon, Fabien Maussion, Harry Zekollari

1. Welcome/Updates

Regine and Ben welcome everyone, especially our new contributor Roderik van de Wal, who keeps the model of Rianne Giesen going in phase II of GlacierMIP and will try to also keep his own model included (which was previously represented by Aimée Slangen).

2. Update on presentations of GlacierMIP

GlacierMIP has been presented at the Network of Arctic Glaciology Meeting in Obergurgl, Austria, January 2018 (Regine Hock), the EGU, Vienna, April 2018 (Rianne Giesen), a workshop in Dunhuang, China, August 2018 (Regine Hock), as well as AGU 2018, Washington, December 2018 (Regine Hock).

One important note: always tell about GlacierMIP when presenting results!
Also please report any presentations that include GlacierMIP activities.

3. State of the publication on Phase I of GlacierMIP

The Paper has been reviewed for Journal of Glaciology and is being revised. Deadline for resubmission is end of January 2019

4. Phase II status and progress

All please note the requirements for participation: see http://www.climate-cryosphere.org/activities/targeted/glaciermip/

Status of data submission:
- Huss: submitted in September 2018, regions 1-19
- Zekollari: submitted in September 2018, region 11
- Kraaijenbrink: submitted in August 2018, regions 13–15
- Fujita/Sakai: submitted in December 2018, regions 1-19 (9 GCMs except GISS-ER2)
- van de Wal: submitted August 2018, regions 1-19

Missing:
- Anderson: will submit region 18 by mid December 2018
- Bliss/Radic: will submit by end of January 2019
- Hirabayashi: will not join phase II
- Marzeion: will submit data for regions 1-18 the end of 2018
- Maussion/Champollion: will submit regions 1-18 by mid of February 2019
- **Moeller**: TBC
- **Rounce/Hock**: will submit data for regions 13, 14, 15 by end of 2018
- **Shannon**: will submit regions 1-18 by end of 2018 for a sub-set of CMIP5 models
- **Fernandez**: will not join phase II

**Important Note**: We agreed that data have to be submitted by **February 15, 2019**, to be part of phase II of GlacierMIP and to be a co-author on the subsequent paper.

5. **Identifying research questions to be addressed in the analysis of Phase II results**
   We discussed questions that should be addressed in the next paper, based on the phase II results. We agreed that it makes most sense to decide specifics after having a first analysis of the data. Independent of this, and having in mind the relevance of our results for IPCC AR6, we will try to validate the emulation-approach of glacier models taken in AR5. Ben will coordinate with Jonathan Gregory.
   A doodle table will be generated where all phase II authors should provide information about their model to facilitate the writing of the paper.

6. **Ideas for GlacierMIP 2 (i.e. new proposal to CliC for continuation of the Targeted Activity)**
   The following ideas were discussed for a continuation of GlacierMIP
   a. include the historical period in the experiments, and include standardized routines for validation
   b. investigate the effect of explicitly considering debris cover
   c. switch to monthly output to investigate annual cycle, and reduce problem of time shift between calendar and mass balance years
   d. include more variables, such as run-off/melt/accumulation/... in the analysis
   e. include idealized experiments (e.g., prescribed anomaly fields of temperature and precipitation, cyclical boundary conditions to run glaciers into equilibrium - also at cold temperatures)
   f. prescribe calibration data

7. **Relevant Deadlines**
   Submission for consideration in IPCC AR6: new paper needs to be submitted by 15 October 2019

8. **Future GlacierMIP meetings**
   Ben and Regine will set up Doodle polls for EGU (April 2019) and IUGG (July 2019)