

Update on GlacierMIP

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Objectives

- glaciers currently contributing about as much to SLR as Greenland and Antarctica combined
- AR5 exposed lack of comparable projections of glacier mass loss

→ need for coordinated effort in the glacier modeling community

Kick-off meeting at IUGG 2015 in Prague

- 9(+1) models confirmed participation
- 7(+1) global coverage (6(+1) productive, 1 in development)
- 2 regional (2 in development)

Tier 1: Intercomparison of published results

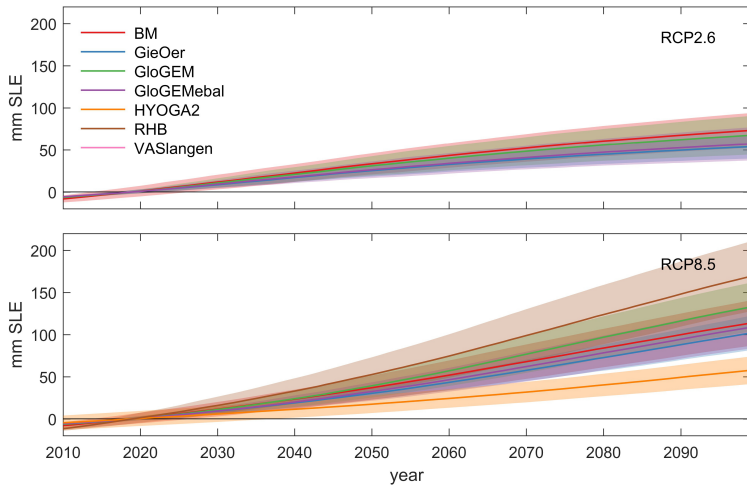
- create common basis of data exchange
- systematic comparison of results
- first quick look at the structure of differences (regional, global, temporal)

Data collection deadline: September 1, 2015 ✓

Data redistribution in netcdf: October 2015 ✓

Analysis and publication: presentation at AGU 2015 (Regine); paper (led by Regine) being prepared for submission in 2016

Results: Glacier Mass Loss (excl. AA and GL PG)



Further Schedule

Tier 2: Dedicated experiments for projections

- coordination of initial and boundary conditions within GlacierMIP
- coordination of boundary conditions with ISMIP6
- potentially include reconstruction
- public archival of results

Specifications & deadlines: discussion started at AGU, to be continued at EGU

Goal: results ready for sea level conference (NY), 2017?

Further Schedule

Tier 3: Dedicated sensitivity experiments

- sensitivity tests of initialization routines (date, volume, area)
- “commitment” and equilibrium sensitivity tests

Specifications & deadlines: to be done later

Links within CliC/WRCP and outside

Links

- grand challenges on sea-level rise, water availability
- ISMIP, Arctic freshwater synthesis, CORDEX
- IACS: RGI working group, ice thickness working group
- GTN-G (WGMS, NSIDC, GLIMS)

Challenges

- lack of funding for many participants, commitment for phase 3 unclear

Benefits we receive from CliC

- visibility, credibility, communications
- enabling meeting attendance