OGGM - PyGEM - ODINN Global Glacier Modeling Workshop 2022

16 - 21 September, Finse, Norway

The workshop will be a balanced mix of social activities, general sessions with presentations from the participants, discussion sessions, and hands-on sessions.

Session overview:
presentation session in red ; hands-on session in blue ; group discussion session in gray

	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday
Morning		Welcome (all) 0H15 Overview presentation (0H30) Fabien Programme discussion (all) 0H15 1.1 Recent developments in global glacier modeling: PyGEM, ODINN, GloGEM, COSIPY (2 H)	1.2 Recent developments in global glacier modeling: OGGM (1:30 H)	1.2.a Recent developments in global glacier modeling: OGGM (part 2) 2. Glacier-related hydrology and data (1:30 H)	3. Glacier evolution, past and future, ensemble studies and intercomparison (1:30 H) Hand-on session (1:30 H) Past simulations with OGGM	Departure
Early afternoon		Group discussion Future of ecosystem (1:30 H)	**Excursion to the glacier (weather dependent)**	Group discussion (1:30 H) Mass-balance models	Hand-on session (1:30 H) See specific program	
Late afternoon		OGGM for beginners (1:30 H)		PyGEM for beginners (1:30 H) (Manual) If time permits: Tips and tricks to run, learn, and explore PyGEM and OGGM	Group discussion (1:30 H) See program	
Evening	Arrival	**Icebreaker - Glacier and Climate pub quiz**				

Sessions with presentations by participants

1. **Recent developments in global glacier modeling (3H30)**

Session 0.0 - Welcome and overview (Fabien, Regine, Ben, David, Anouk)

Session 1.1 - PyGEM, ODINN, GloGEM, COSIPY (2H00, chair: Anouk)

David Rounce (15-20 min) - The Python Glacier Evolution Model (PyGEM): latest applications and future vision

Jordi Bolibar and Facundo Sapienza (10 + 10 min) - ODINN

Harry Zekollari (15-20 min) - Modelling the large-scale evolution of glaciers with GloGEMflow

Niklas Richter (10-15) - Exploring the dimensionality and radiation module for SEB modelling using COSIPY

Session 1.2a - OGGM (1H30, chair: Ben)

Lilian Schuster (10-15) - Influence of temperature-index model type and climate downscaling parameters on large scale glacier change projections

Seyedhamidreza Mojtabavi (10-15 min) - What is the effect of debris cover on global glacier mass change?

Patrick Schmitt (10-15 min) - Model initialization using numerical modelling and cost minimization - An update on COMBINE

2. **Glacier-related hydrology and data (1H30)**

Session 1.2b - OGGM (0H30, chair: Ben)

Francesc Roura Adserias (5 min) - Glacier Centerlines: the flowline algorithm now outside OGGM

Jan-Hendrik Malles (10-15 min) - Water-terminating glaciers in OGGM: developments and outlook

Fabien (10-15 min) - Recent developments in standard OGGM

Session 2.1 - hydrology (1H00, chair: David)

Rodrigo Aguayo (10-15 min) - Modeling the freshwater inputs to the coastal system of Western Patagonia: challenges in poorly monitored areas

Fabien Maussion (15 min) - Hydrological projections in PROVIDE

Sadaf Ismail (10-15 min) - Glacial Lakes in Karakoram, Himalayas.

Ruitang Yang (Poster) - Influence of glacier runoff on seasonal ice speed variation on the Kenai Peninsula, Alaska

Session 2.2 - Data and Machine Learning (0H30, chair: Fabien)

Jack Mason (5 min) - Constraining past and future glacier mass changes in the Brooks Range, Alaska

Sangita Tomar (10-15 min) - Remote sensing based approach to monitor glacier velocity and ice thickness

Codrut-Andrei Diaconu (Poster) - Glacier Mass Balance Modelling using Deep Learning

3. **Glacier evolution, past and future, ensemble studies and intercomparison (1H30)**

Session 3.1 - General (0H40, chair: Regine)

Francesc Roura Adserias (10-15 min): Toward ice-free Pyrenees: the case of Aneto glacier

Dylan Kreynen (5 min) - Svalbard Surges in a Large-Scale Glacier Evolution Model

Julien Seguinot (5 min) - Towards global mountain paleoglacier modelling

Session 3.2 - Attribution (0H50, chair: Regine)

Anouk Vlug (10-15 min) - The influence of climate forcings on the global glacier mass balance over the last millennium

Ben Marzeion (10-15 min) - A path to reconciling studies of attribution of glacier mass loss?

Larissa van der Laan (5 min) - Exploring seasonal modelling and attribution with OGGM

Discussion Tuesday Afternoon

13H:
All - density assumption in geodetic calibration
All - outreach & communication
All - Planned & submitted papers / proposals, future job offers
All - Job perspectives in the field of mountain glacier modeling in general

14H30 - 14H45: Break

14H45: Breakout sessions!

Main room: OGGM for past simulations (tutorials, discussion)
Breakout room 1: PyGEM future discussion group
Breakout room 2: New calibration schemes (Lilian)

16H30: Late breakout sessions