



**PAL  
MOD**

GERMAN  
CLIMATE  
MODELING  
INITIATIVE

## Newsletter 01 / 2021

You find further details on PalMod II at <https://www.palmod.de>

### **Dear PalMod II members,**

We wish alle readers of the PalMod Newsletter a happy and healthy new 2021!

### **PalMod Seminar Series**

The next talk of the seminar Series will be given by **Lukas and Gerrit**:

**Tue. 19. Jan 2021, 15 h:**

- **G.Lohmann** (AWI): Simulation the Glacial Climate and Ocean Circulation: Challenges for PalMod
- **L. Jonkers** (MARUM): Are climate models underestimating spatial temperature variability?

#### **Connection Details:**

<https://geomar.webex.com/geomar/j.php?MTID=me133300766e783acf187ed1a3224e8d9>

Meeting number: 174 483 6013

Password: P5q2JTEmR6z

### **Save the dates for following upcoming Meetings**

- **WG1:** 25. Jan 2021
- **WG2:** 03. Feb 2021
- **WG3:** 23. Feb. 2021
- **Mid Term Retreat with WG & WP heads:** 2. & 3. Mar 2021
- **CC:** 17. & 18. Mar 2021 -> everyone is invited to attend, information will follow soon
- **PalMod General Assembly 2021:** 27. & 28 May 2021

### **PalMod-related Presentations**

#### **Recent Presentations**

From the AGU Falls Meeting

V. Klemann (GFZ), Meike Bagge (GFZ) & Zdenek Martinec: **Relaxation behavior of a laterally varying earth model in response to glacial loading**

<https://agu.confex.com/agu/fm20/webprogram/Paper719193.html> (incl. recording)

#### Upcoming PalMod related EGU Sessions



**EGU General Assembly 2021**

vEGU21: Gather Online | 19–30 April 2021

**Call for Abstracts**  
Submission deadline: 13 January 2021 at 13:00 CET

**Session**  
CR3.9, co-organised by CL4/G3/GD8/GM7

**Characterizing interactions between ice sheets, solid Earth and sea level by observations, data assimilation and coupled modelling**

**Conveners**  
Meike Bagge, Torsten Albrecht, Evelyn Powell, Kira Rehfeld, Ricarda Winkelmann



**EGU General Assembly 2021**

vEGU21: Gather Online | 19–30 April 2021

**Call for Abstracts**  
Submission deadline: 13 January 2021 at 13:00 CET

**Session**  
CL1.2, co-organised by BG2/NP1

**Palaeoclimate modeling: from time-slices and sensitivity experiments to transient simulations into the future**

**Conveners**  
Kira Rehfeld, Heather Andres, Julia Hargreaves

[meetingorganizer.copernicus.org/EGU21/session/40689](https://meetingorganizer.copernicus.org/EGU21/session/40689)

If you know of other EGU Sessions of interest to PalMod members, please contact me ([kfieg@geomar.de](mailto:kfieg@geomar.de))

## **New PalMod I or II - related Publications and Data**

Dobslaw, H., Dill, R., **Bagge, M.**, **Klemann, V.**, Boergens, E., Thomas, M., Dahle, C., & Flechtner, F. (2020). Gravitationally Consistent Mean Barystatic Sea Level Rise From Leakage-Corrected Monthly GRACE Data. *Journal of Geophysical Research: Solid Earth*, 125(11). <https://doi.org/10.1029/2020JB020923>

Gottschalk, J., Michel, E., Thöle, L.M. ..., **Butzin, M. et al.** Glacial heterogeneity in Southern Ocean carbon storage abated by fast South Indian deglacial carbon release. *Nat Commun* **11**, 6192 (2020). <https://doi.org/10.1038/s41467-020-20034-1>

Köhler, P., & Munhoven, G. (2020). Late Pleistocene carbon cycle revisited by considering solid Earth processes. *Paleoceanography and Paleoclimatology*, 35, e2020PA004020. <https://doi.org/10.1029/2020PA004020>

## Milestones and Deliverables

**NEW: Deliverable CC.2 D2 - Definition of PalMod-CMOR table** is available for download from the internal PalMod pages:

([https://www.palmod.de/documents/1146045/1396800/Deliverable\\_CC2\\_D2.pdf/61b2922e-ea48-4347-bc7d-02465954b36d](https://www.palmod.de/documents/1146045/1396800/Deliverable_CC2_D2.pdf/61b2922e-ea48-4347-bc7d-02465954b36d) )

updated traffic light, 05.01.2021

WP	WG	Due To	DAYS-T	05.01.21	Responsible	Task
WG1	WP1.3 M1	30.06.20	-189	done / overdue	PIK	Investigation of the effect of asynchronous coupling
WG3	WP3.2 M1	30.09.20	-97	done / overdue	GFZ	Synchronization of lacustrine and marine data-bases
WG2	WP2.1 M3	30.09.20	-97	done / overdue	MPI	Successful implementation adjustments and extensions that are necessary in HAMOCC for the transient simulations in interactive carbon cycle mode
WG2	WP2.3 M4	30.09.20	-97	done / overdue	MPI-C	New, improved lightning NOx parameterization in EMAC and MPI-ESM
WG3	WP3.3 M3	30.12.20	-6	done / overdue	AWI	Spectral estimation methods established and tested
WG3	WP3.3 D4	30.12.20	-6	done / overdue	AWI-P	Documentation of the spectral estimation method accounting for proxy biases
WG2	WP2.1 M1	30.12.20	-6	done / overdue	AWI	Adjust REcoM model for simulating prognostic atmospheric CO2 concentrations, including fluxes from weathering, and volcanism.
WG2	WP2.1 M2	30.12.20	-6	done / overdue	AWI	Include iron sources from marine shelves, rivers, hydrothermal activity and sea ice in REcoM
WG2	WP2.1 M5	30.12.20	-6	done / overdue	MARUM	Transient simulations including marine carbon isotopes for an abrupt climate change event during MIS3 and Termination I set up in CESM and ready to run
WG1	WP1.4 M4	30.12.20	-6	done / overdue	GEOMAR	Implementation of spatial refinement (1/10°) in FOCI with focus on the Atlantic Sector of the Southern Ocean Nest 1
WG1	WP1.4 M1	30.12.20	-6	done / overdue	GFZ	Set-up of reference 3d earth structure in VILMA for use in main GCMs for coupling to ice-sheet dynamics and for sea-level reconstructions
CC	CC2 M13	30.12.20	-6	done / overdue	UHD	Design of the toolbox interface completed, including scripts computing pseudo-proxy-tested metrics for variability changes in surface climate and environmental variables applicable to proxy and model data
CC	CC2 M16	30.12.20	-6	done / overdue	GEOMAR	Proxy eruption data compiled and homogenized, eruption frequency variations estimated

**Please note:** according to my bookkeeping **13 milestones** are overdue. So

- if you met a milestone or deliverable please let me know, so I can remove it from the list
- if it foreseeable that you have to shift a milestones or deliverables to later, let me know ([kfieg@geomar.de](mailto:kfieg@geomar.de)), so I can inform the Projektträger DLR.

The full list of Milestones and Deliverables:

<https://www.palmod.de/group/palmod/milestones-deliverables>

## More useful news and links

The protocol of the last Steering Group Meeting, 14.12.2020 can be found:

<https://www.palmod.de/group/palmod/protocols>



PalMod now has a twitter account: @PalMod\_Project, please follow us!

If you have something to twitter let me know, if you are interested to join the PalMod Twitter team, please contact me ([kfieg@geomar.de](mailto:kfieg@geomar.de)).