



**PAL
MOD**

GERMAN
CLIMATE
MODELING
INITIATIVE

Newsletter 12 / 2020

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

Dear PalMod II members,



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).

PalMod Seminar Series

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

Wed. 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?

Save the dates for upcoming Annual Meetings

WG1: 25. Jan 2021

WG2: 03. Feb 2021

WG3: January 2021

CC: 17. & 18. Mar 2021 -> everyone is invited to attend, information will follow in January
PalMod General Assembly 2021: May 2021 (most likely online)

--- Details will follow -----

PalMod-related Presentations

Recent Presentations

29th of October: Marie Kapsch (MPI-M)

Key Note Talk at PMIP2020 - "Transient simulations of past climates with comprehensive Earth System Models"

- PLEASE NOTE: Marie will to give her keynote talk again as PalMod Series talk in February 2021

12th of November: Marie Kapsch (MPI-M)

Talk at QUIGS-IFG Meeting On Glacial Terminations - "Ice sheet reconstructions crucial for response of ocean circulation in deglacial climate simulations"

Upcoming EGU Sessions



EGU General Assembly 2021
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

vEGU21: Gather Online | 19–30 April 2021

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

New PalMod I or II - related Publications and Data

Fuhrmann, F., Diansberg, B., Gong, X., Lohmann, G., and Sirocko, F.: Aridity synthesis for eight selected key regions of the global climate system during the last 60 000 years, *Clim. Past*, 16, 2221–2238, <https://doi.org/10.5194/cp-16-2221-2020>, 2020.

Data: Fuhrmann, F., Diansberg, B., Gong, X., Lohmann, G., & Sirocko, F. (2020). Aridity synthesis for 8 selected key regions of the global climate system during the last 60 000 years [Data set]. *Climate of the Past*. Zenodo. <http://doi.org/10.5281/zenodo.4094684>

Renoult, M., Annan, J., Hargreaves, J., Sagoo, N., Flynn, C., Kapsch, M.-L., Mikolajewicz, U., Ohgaito, R. & Mauritsen, T. (2020). A Bayesian framework for emergent constraints: case studies of climate sensitivity with PMIP. *Climate of the Past*, 16, 1715-1735. doi:10.5194/cp-16-1715-2020

Leroy, S., Arpe, K., Mikolajewicz, U. & Wu, J. (2020) Climate simulations and pollen data reveal the distribution and connectivity of temperate tree populations in eastern Asia during the Last Glacial Maximum. *Climate of the Past* 16, 2039–2054 [doi:10.5194/cp-16-2039-2020](https://doi.org/10.5194/cp-16-2039-2020).

Klockmann, M., Mikolajewicz, U., Kleppin, H. & Marotzke, J. (2020). Coupling of the subpolar gyre and the overturning circulation during abrupt glacial climate transitions. *Geophysical Research Letters*, 47: e2020GL090361. doi:10.1029/2020GL090361

Fettweis, X., Hofer, S., Krebs-Kanzow, U., Amory, C., Aoki, T., Berends, C., Born, A., Box, J., Delhasse, A., Fujita, K., Gierz, P., Goelzer, H., Hanna, E., Hashimoto, A., Huybrechts, P., Kapsch, M.-L., King, M., Kittel, C., Lang, C., Langen, P., Lenaerts, J., Liston, G., Lohmann, G., Mernild, S., Mikolajewicz, U., Modali, K., Mottram, R., Niwano, M., Noël, B., Ryan, J., Smith, A., Streffing, J., Tedesco, M., van de Berg, W., van den Broeke, M., van de Wal, R., van Kampenhout, L., Wilton, D., Wouters, B., Ziemen, F. & Zolles, T. (2020). GrSMBMIP: Intercomparison of the modelled 1980-2012 surface mass balance over the Greenland Ice sheet. *The Cryosphere*, 14, 3935-3953. doi:10.5194/tc-14-3935-2020

Milestones and Deliverables

updated traffic light, 02.12.2020

WP	WG	Due To	DAYS	02.12.20	Responsible	Task
WG1	WP1.3 M1	30.06.20	-155	done / overdue	PIK	Investigation of the effect of asynchronous coupling
WG3	WP3.2 M1	30.09.20	-63	done / overdue	GFZ	Synchronization of lacustrine and marine data-bases
WG2	WP2.1 M3	30.09.20	-63	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	-63	done / overdue	MPI-C	New, improved lightning NOx parameterization in EMAC and MPI-ESM
WG3	WP3.3 M3	30.12.20	28	less than one month left	AWI	Spectral estimation methods established and tested
WG3	WP3.3 D4	30.12.20	28	less than one month left	AWI-P	Documentation of the spectral estimation method accounting for proxy biases
WG2	WP2.1 M1	30.12.20	28	less than one month left	AWI	Adjust REcoM model for simulating prognostic atmospheric CO2 concentrations, including fluxes from weathering, and volcanism.
WG2	WP2.1 M2	30.12.20	28	less than one month left	AWI	Include iron sources from marine shelves, rivers, hydrothermal activity and sea ice in REcoM
WG2	WP2.1 M5	30.12.20	28	less than one month left	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	28	less than one month left	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	28	less than one month left	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	28	less than one month left	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	28	less than one month left	GEOMAR	Proxy eruption data compiled and homogenized, eruption frequency variations estimated
CC	CC2 D2	30.12.20	28	less than one month left	DKRZ	Definition of PalMod-CMOR table

Please note: according to my bookkeeping **4 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 2021, drop me a note (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, 26.11.2020 can be found:

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