Newsletter 09 / 2021

Dear PalMod members,

Thank you everyone for handing in the exciting collection of sketches for PalMod Phase III!

The coordination team together with the steering group is about to cluster the ideas and form work packages to start the drafting of the proposal as soon as possible. This might also include a reshaping of the working groups that we proposed in the last Newsletter. We will provide you with more information during the next weeks.

Please, keep an eye on the Milestones and Deliverables. According to my book keeping to date, 15 are overdue but 21 more are scheduled for end of September 2021.

SAVE THE DATES for the PalMod Seminar Series

1. Fri., 9. Sept.2021, 11h:
U. Mikolajewicz (MPI-M) & J. Lippold (Uni Heidelberg):
A data and model perspective on the Atlantic Ocean circulation from the Glacial to the Holocene

Connection details:
Join Zoom Meeting
https://geomar-de.zoom.us/j/81106632350?pwd=V01MTThMVjhYZXErNnlESnBJV1psdz09
Meeting ID: 811 0663 2350
Passcode: 687248

2. Fri., 5. Nov.2021, 11h:
S. Mulitza (MARUM) & M. Werner (AWI):
tbc

Update on Milestones and Deliverables

Updated traffic lights, 06.09.2021

1. M & D overdue

WP	WG	Due To	DAYS	Responsible	Task
WG3	WP3.3 M1	30.06.21	-68	Marum, AWI-B	Transient simulations including water isotopes for an abrupt climate change event during MIS3 and Termination I set up and ready to run
WG3	WP3.1 M3	30.06.21	-68	Marum	Development of age modelling strategies for time series without radiocarbon age control
WG2	WP2.1 M1	30.06.21	-68	AWI	Adjust REcoM model for simulating prognostic atmospheric CO2 concentrations, including fluxes from weathering, and volcanism.
WG2	WP2.1 M2	30.06.21	-68	AWI	Include iron sources from marine shelves, rivers, hydrothermal activity and sea ice in REcoM
WG2	WP2.3 M1	30.06.21	-68	MPI-M	Transient deglaciation experiment with improved atmospheric sink component performed, publication draft
WG2	WP2.1 M4	30.06.21	-68	CAU	Transient effect of aeolian dust deposition changes and of temperature and sea level variations on ballasting implemented in HAMOCC
WG2	WP2.2 M1	30.06.21	-68	MPI	The development of vegetation and terrestrial carbon on exposed shelves and the leading factors for this development are figured out
WG2	WP2.2 M3	30.06.21	-68	PIK	Quantification of carbon cycle feedbacks operating through shelf processes during glacial inception and deglaciation with CLIMBER-X
WG2	WP2.3 M5	30.06.21	-68	MPI-C	Analysis of methane sink in transient simulations, publication draf
WG2	WP2.3 D3	30.06.21	-68	MPI-C	Publication on transient deglaciation experiments with methane sinks submitted
WG2	WP2.1 M5	30.06.21	-68	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
CC	CC2 M5	30.04.21	-129	HZG	Publication of initial standardized proxy data
CC	CC2 M10	30.06.21	-68	U Bonn	Bayesian framework set up and examples of probabilistic evaluations of temperature and precipitation in time slice simulations against pollen synthesis / macro fossils available
CC	CC2 D8	30.06.21	-68	Uni Bonn	Plugin for Bayesian framework of spatial evaluation (time slices) documented and ready for integration in toolbox
CC	CC2 M14	30.06.21	-68	UHD	Spatio-temporal plot workflow for the model-data comparison toolbox facilitating visual browsing of results

2. Upcoming M & D end of September

WG3	WP3.3 D1	30.09.21	24	Marum, AWI-B	Transient simulations including water isotopes for abrupt climate change events during MIS3
WG3	WP3.3 D2	30.09.21	24	Marum, AWI-B	Transient simulations including water isotopes for Termination I
WG3	WP3.1 D6	30.09.21	24	Marum	Updated version of PaleoDataView including DTW functionality
WG2	WP2.3 D1	30.09.21	24	MPI-M	Publication on transient deglaciation experiments with methane sinks submitted
WG1	WP1.2 M1	30.09.21	24	AWI, Marum, MPI	Analysis of the stability in steady-state simulations
WG1	WP1.2 M2	30.09.21	24	AWI, Marum, MPI	Analysis of ice sheet stability in ice sheet - solid earth simulations
WG1	WP1.2 M3	30.09.21	24	AWI, Marum, MPI	Data from first asynchronosly coupled MIS3 simulations available to the PalMod community
WG1	WP1.1 M1	30.09.21	24	AWI, Marum, MPI	Analysis of control factors for the occurance of deglaciation key events
WG1	WP1.1 D2	30.09.21	24	AWI, Marum, MPI	Deglacial stability analysis with interactive ice sheets
WG1	WP1.3 M2	30.09.21	24	AWI, Marum, MPI, PIK	Analysis on the effect of ice sheet initalisation on glacial inception; re-tuning of model parameters
WG1	WP1.3 M4	30.09.21	24	PIK	Analysis of climate and carbon cycle feedbacks
WG1	WP1.3 D1	30.09.21	24	PIK	Providing early doagnostics in the ice sheet-climate system based on full glacial cycle CLIMBER-X simulations
CC	CC2 D14	30.09.21	24	GEOMAR	Statistical reconstruction of volcanic forcing for the last 130,000 years
CC	CC1 M5	30.09.21	24	CAU	Realization of modified, advection-adapted parareal method for FESOM, documentation of convergence and efficiency results
CC	WS CC2 -2	30.09.21	24	DKRZ, HZG, UHD	Workshop on data standardization, data archiving, and implementation of model-data comparison tools in cooperation with WGs 1-3
CC	CC1 M2	30.09.21	24	DKRZ	Prototype of asynchronous model component coupling in MPI-ESM1 and AWI-ESM, including optimized load balancing
CC	CC1 M10	30.09.21	24	MPI	Dynamic lake model successfully integrated into the MPI-ESM1 PalMod setup and coupled to the atmosphere
CC	CC1 M11	30.09.21	24	MPI	Successful implementation of the coupling between land (JSBACH) and ocean biogeochemistry (HAMOCC) at the transiently changing land-sea interface into the MPI-ESM1 PalMod setup
CC	WS CC1 - 2	30.09.21	24	DKRZ	Second workshop on software development and management. Dissemination of the esm-tools and further improvements for the used ESMs; answering the question, how developments by PalMod members will get back into the main branches
CC	CC2 D11	30.09.21	24	UHD	v0.1 of the toolbox combining consistent metrics for surface climate changes in model and proxy data installed on MISTRAL and available to the PalMod community for testing
CC	CC2 D15	30.09.21	24	GEOMAR, MPI	Volcanically forced and unforced snapshot simulations with MPI-ESM available

You find the documentations of all Milestones and Deliverables completed here: https://www.palmod.de/group/palmod/milestones-deliverables

If you meet a milestones or deliverable let me know, so I can remove it from the list - if you have to shift a milestones or deliverables, please contact me (kfieg@geomar.de)

Update on DKRZ business, 06.09.2021

1. Resources consumption

DKRZ Project	[n*h] Granted for 2021	[n*h] Used by 21.06.2021*	[n*h] to be used until cut end of September (= 3/4 of granted)
0989 / WG1	1.197.637	932.380	898.228 nh
1030 / WG2	670.282	398.570	502.771 nh
1029 / WG3	151.200	115.334	112.400 nh
CC / 0993	125.737	60.646	94.303 nh

* incl. reallocated / expired resources

Please note: to minimise the cut end of September, the PIs will be contacted and asked to agree in a relocation of resources.

2. Summary of PalMod DKRZ Resources request 2022

Subproject	Computation time [node hours]	Storage WORK [GiB]	Storage ARCH [GiB]	Storage DOCU [GiB]
WG1, ba0989	1.927.263	1.684.000	6.685.100	3.147.000
CC, bk0993	169.000	204.000	70.000	-
WG3, bb1029	124.200	673.000	344.000	39.000
WG2, bm1030	858.800	1.852.940	907.440	310.000
DM, bk1192	50.000	150.000	150.000	-
Total	**3.129.263**	**4.563.940**	**8.156.540**	**3.496.000**

We expect the decision of WLA end of October 2022.

More useful news and links

All protocols of the Steering Group Meetings can be found here:
https://www.palmod.de/group/palmod/protocols

For general details on the PalMod II project see https://palmod.de