

Newsletter January 2023

Dear PalMod members,

I wish everyone a happy new year with, health and confidence!

I am glad to announce that as of 2. January 2023, the individual applications for the PalMod Phase III of the institutions and all necessary deck-documents were submitted to the Projektträger DLR.

For this, the recommendations of the reviewers had to be answered and the project sketch for PalMod Phase III, which we submitted last year in January 2022, had to be updated. This has been well accomplished with your dedicated help!

The plan is now, that the individual subprojects of PalMod Phase III will start their work from June 2023 on - depending on the cost-neutral extension granted to Phase II to date.

A short overview of the structure of PalMod Phase III and the work packages can be found later in this newsletter.

In addition, you will find the usual update on the overdue milestones and deliverables in this Newsletter, as well as an overview on computing time and storage resources granted by WLA of the DKRZ to the PalMod consortia.

Moreover, I would like to remind the subprojects that have already been finished in 2022 to submit their final reports of PalMod Phase II in time to the Projektträger (with a copy for me, please).

...and another kind request: please help me with my bookkeeping by informing me if you published a PalMod funded paper or a paper with PalMod in-kind contribution.

Structure of PalMod Phase III in a nutshell

SAB

Program Coordination & Steering Committee

Transient Simulations of the past and future | model assessment

Interactive Ice Sheet Dynamics

WG 1

- 1.1 Decay of ice sheets from the glacial to the future
 - 1.2 Glacial climate variability
- 1.3 Build up of ice sheetsfrom the interglacial to the glacial
 - 1.4 Ice -Sheet Instabilities

Added Carbon Cycle Complexity

WG 2

- 2.1 Feedbacks of the terrestrial biosphere the role of methane, vegetation, permafrost.
- 2.2 Feedbacks of the marine biogeochemistry - the role of circulation, biology, sedimentation.

Evaluating climate variability

WG 3

- 3.1 Pattern of abrupt climate change
- 3.2 Isotope and climate variability since the last deglaciation
- 3.3 The spectrum of climate across climate states and relevance for future climate projections

Cross Cutting Activities: Data Hub

CC1: Data Management CC2: Proxy Data Hub

CC3: Tools for integrated model-data analyses

	FTE
WG1	35.25
WG2	23.50
WG3	13.70
CC	8
Coordination	3
TOTAL	83.45

Working	Work Package	Pis (lead Pis BOLD	Institution
Group			
WG1	WP1.1	KAPSCH, Mikolajewicz	MPI
		Prange, Paul	MARUM
		Lohmann, Knorr	AWI
	WP1.2	KNORR, Lohmann	AWI
		Prange, Merkel	MARUM
		Schanwell, Mikolajewicz	MPI
	WP1.3	PRANGE	MARUM
		Lohmann, Knorr	AWI
		Six, Mikolajewicz	MPI
	WP1.4	BAGGE	GFZ

		Lohmann		AWI	
		Winkelmann, Albrecht, Ganop	olski	PIK	
		•			
WG2	WP2.1	KLEINEN, Claussen, Riddick MP		1	
		Herzschuh	AWI		
	WP2.2	LIU	MP	1	
		Völker	AW	/ I	
		Heinemann	CAI	J	
		Paul, Schulz N		ARUM	
		·	•		
WG3	WP3.1	JONKERS MA		RUM	
		Chevalier Uni Bor		Bonn	
	WP3.2	WERNER AWI		/ I	
		Paul MARUM		RUM	
	WP3.3	REHFELD	Uni Tübingen		
		Läpple	AWI		
			•		
CC	CC1	GEHLOT	DKRZ		
	CC2	MULITZA		RUM	
	CC3	REHFELD Uni Tül		Tübingen	

In short: we will become a consortium with 28 Förderkennzeichen (12 x WG1, 6x WG2, 6x WG3, 3x CC, 1x coordination) and ask for (in total) 83.45 FTE (years of full time equivalent personelle resources)

Update on Milestones and Deliverables (Status 03.01.2023)

С	D	Н		К	Formula Bar
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WP	WG	Due To	DAYS -T	Responsible	Task
					Biogeophysical and biogeochemical feedbacks between terrestrial biosphere and climate are
WG2	WP2.2 M2	30.06.22	-187	MPI	assessed
WG3	WP3.1 D4	30.06.22	-187	Marum	Global synthesis of planktonic foraminifera abundance time series spanning 130,000 years
WG3	WP3.1 M4	30.06.22	-187	Marum	Finalise synthesis of planktonic foraminifera abundance time series
WG3	WP3.2 M6	30.06.22	-187	AWI	Vegetation dynamics analysed including model-proxy comparison
WG3	WP3.2 M9	30.06.22	-187	MUN	Inclusion of some of the major last glacial cycle ice caps
WG3	WP3.3 D3	30.06.22	-187	Marum, AWI-B	Transient simulations including water isotopes for last glacial inception
cc	CC2 M18	30.03.22	-279	GEOMAR	Volcanic forcing data files constructed and tested
WG2	WP2.2 M6	30.03.22	-279	UNI HH	Manuscript about the role of shelf weathering on land-ocean biogeochemical matter fluxes
WG3	WP3.1 D2	30.03.22	-279	Marum	Extended marine paleoclimate data synthesis
WG3	WP3.1 M2	30.03.22	-279	Marum	Updated marine proxy synthesis that includes temperature reconstructions without benthic $\delta 180$ chr
WG3	WP3.2 D2	30.03.22	-279	GFZ	Update of the PALIM data-base to integrate chronological links to the marine data-base
WG3	WP3.2 M1	30.03.22	-279	GFZ	Synchronization of lacustrine and marine data-bases
WG3	WP3.2 M3	30.03.22	-279	GFZ	Improved proxy-system models for key climate proxies including varve thickness data
					Revised calibrated distribution of last glacial cycle ice sheet chronologies and associated 1D regional
WG3	WP3.2 M8	30.03.22	-279	MUN	Earth models
WG3	WP3.3 M2	30.03.22	-279	Marum, AWI-B	Transient simulations of the Holocene and last glacial inception set up and ready to run
WG2	WP2.2 M5	30.12.21	-369	UNI HH	Mapping of the geochemical and lithological characteristics of the continental shelves
WG2	WP2.3 M5	30.11.21	-399	MPI-C	Analysis of methane sink in transient simulations, publication draf
WG2	WP2.3 D3	30.11.21	-399	MPI-C	Publication on transient deglaciation experiments with methane sinks submitted
WG3	WP3.1 D6	30.09.21	-460	Marum	Updated version of PaleoDataView including DTW functionality
					Adjust REcoM model for simulating prognostic atmospheric CO2 concentrations, including fluxes
WG2	WP2.1 M1	30.06.21	-552	AWI	from weathering, and volcanism.
WG2	WP2.1 M2	30.06.21	-552	AWI	Include iron sources from marine shelves, rivers, hydrothermal activity and sea ice in REcoM
					T

If you meet a M or D, please let me know (kfieg@geomar.de), so I can remove it from the list!

Granted resources at HLRE4/Levante in 2023

Resource	Granted 1/2	2023 to 12/2023	Cut by	Original Request
Levante CPU nodes [No	ode hours]	1.165.325	60%	2.913.312
Levante GPU nodes [No	ode hours]	0	0%	
Levante storage [TiB]		2.595	30%	3.707
Archive project [TiB]		0	0%	
Archive long term [TiB]		0	0%	

I assigned the granted computing time and storage resources for PalMod to the five project accounts proportionally as they were requested in the proposal. Please note, that the resources can be shifted on request. If necessary, please contact me, kfieg@geomar.de