



**PAL  
MOD**

GERMAN  
CLIMATE  
MODELING  
INITIATIVE

## PalMod and PalMod related contributions @EGU 2025

### Session

CL4.11

[Palaeoclimate modeling: From time-slices and sensitivity experiments to evaluating transient simulations for improved future projections](#)

Co-organized by NP5

Convener: [Kira Rehfeld](#) | Co-conveners: [Julia Brugger](#), [Isma Abdelkader Di Carlo<sup>ECS</sup>](#), [Matteo Willeit<sup>ECS</sup>](#), [Elisa Ziegler<sup>ECS</sup> Orals](#) | Fri, 02 May, 14:00–15:45 (CEST)

Room 0.49/50 [Posters on site](#) | Attendance Fri, 02 May, 10:45–12:30 (CEST) | Display Fri, 02 May, 08:30–12:30

### Talks

EGU25-15910 | **ECS** | Orals | [OS1.8](#)

[Multi-millennial future warming scenarios with the comprehensive Earth system model AWIESM](#)

**Lars Ackermann**, Gregor Knorr, Matteo Willeit, and Gerrit Lohmann

Mon, 28 Apr, 09:35–09:45 (CEST) Room 1.61/62

EGU25-19394 | Orals | [OS1.8](#) | **Highlight**

[Warm climates in the Arctic: Lessons from the past and long-term future](#)

**Gerrit Lohmann**

Mon, 28 Apr, 12:05–12:25 (CEST) Room 1.61/62

EGU25-20469 | Orals | [CL4.2](#)

[Interglacials as test bed for climate change and variability in climate models](#)

**Gerrit Lohmann**, Lars Ackermann, Xiaoxu Shi, Ruijian Gou, and Yifan Ma

Thu, 01 May, 12:00–12:20 (CEST) Room 0.31/32

EGU25-16780 | **ECS** | Orals | [CL1.2.5](#)

[Differences between simulated and observed surface temperature variability in the tropics versus extratropics](#)

**Elisa Ziegler**, Beatrice Ellerhoff, Nils Weitzel, Marie-Luise Kapsch, Uwe Mikolajewicz, and Kira Rehfeld Tue, 29 Apr, 16:20–16:30 (CEST) Room 0.49/50

EGU25-17475 | **ECS** | Orals | [CL1.2.5](#)

[Paleoclimate reconstructions based on European pollen data since the Last Glacial Maximum: probabilistic inversion, megabiomization, and multi-method approach](#)

**Gabriel Fénisse**, Manuel Chevalier, Odile Peyron, David Vincent Bekaert, and Pierre-Henri Blard Tue, 29 Apr, 16:40–16:50 (CEST) Room 0.49/50

EGU25-10664 | **ECS** | Orals | [CL1.2.10](#)

[Magnitude of anthropogenic CO<sub>2</sub> emissions and pre-industrial carbon cycle state as key factors which determine timing of the next glacial period](#)

**Christine Kaufhold**, Matteo Willeit, Guy Munhoven, Volker Klemann, and Andrey Ganopolski  
Wed, 30 Apr, 09:05–09:15 (CEST) Room 0.31/32

EGU25-9702 | Orals | [CL1.2.10](#)

**[Generalized stability landscape of the Atlantic Meridional Overturning Circulation](#)**

**Matteo Willeit** and Andrey Ganopolski

Wed, 30 Apr, 10:05–10:15 (CEST) Room 0.31/32

EGU25-8507 | Orals | [CL1.2.10](#)

**[Deglaciation and abrupt events in a coupled comprehensive atmosphere--ocean--ice sheet--solid earth model](#)**

**Uwe Mikolajewicz**, Marie-Luise Kapsch, Clemens Schannwell, Katharina D. Six, Florian A. Ziemer, Meike Bagge, Jean-Philippe Baudouin, Olga Erokhina, Veronika Gayler, Volker Klemann, Virna L. Meccia, Anne Mouchet, and Thomas Riddick

Wed, 30 Apr, 11:15–11:25 (CEST) Room 0.31/32

EGU25-16252 | ECS | Orals | [CL1.2.10](#)

**[Southern Hemisphere leads global temperature changes during the last Glacial Cycle](#)**

**Jean-Philippe Baudouin**, Matteo Willeit, Nils Weitzel, Lukas Jonkers, Stefan Mulitza, and Kira Rehfeld Wed, 30 Apr, 09:35–09:45 (CEST) Room 0.31/32

EGU25-16025 | Orals | [CR2.2](#)

**[Greenland and Antarctica as Interacting Constitutes in AWI-ESM](#)**

**Christian Rodehacke**, Lars Ackermann, Paul Gierz, Ahmadreza Masoum, and Gerrit Lohmann  
Wed, 30 Apr, 16:50–17:00 (CEST) Room L3

EGU25-1563 | ECS | Orals | [OS1.2](#)

**[Diagnosing the Atlantic Meridional Overturning Circulation under density surfaces is critical in the context of abrupt climate change](#)**

**Fernanda DI Alzira Oliveira Matos**, Dmitry Sidorenko, Xiaoxu Shi, Lars Ackermann, Jan Streffing, Janini Pereira, Christian Stepanek, Gerrit Lohmann, and Paul Gierz

Tue, 29 Apr, 09:15–09:25 (CEST) Room E2

EGU25-6396 | Orals | [MAL13-OS](#)

**[Predictability and feedbacks of the changing ocean carbon sink – insights from Earth system models](#)**

**Tatiana Ilyina**

Tue, 29 Apr, 19:28–19:58 (CEST) Room M2

**[Regional Contrasts in LGM to Holocene Warming Trends in the Terrestrial Arctic: Insights from Sedimentary Ancient DNA](#)**

**Ulrike Herzschuh**, Thomas Boehmer, Kathleen Stoof-Leichsenring, Simeon Lisovski, Anne Dallmeyer, and Darrell Kaufman Thu, 01 May, 14:15–14:25 (CEST) Room 2.24

EGU25-20469 | Orals | [CL4.2](#)

**[Interglacials as test bed for climate change and variability in climate models](#)**

**Gerrit Lohmann**, Lars Ackermann, Xiaoxu Shi, Ruijian Gou, and Yifan Ma

Thu, 01 May, 12:00–12:20 (CEST) Room 0.31/32

EGU25-12616 | Orals | [CL1.2.12](#)

[Silicic acid leakage during Last Glacial Maximum and glacial termination](#)

**Ying Ye**, Peter Köhler, Martin Butzin, and Christoph Völker

Fri, 02 May, 12:00–12:10 (CEST) Room 0.31/32

EGU25-8759 | Orals | [CL1.2.12](#)

[Challenges and insights in comparing simulated tree cover changes over the last 20,000 years with reconstructions for the Northern Hemisphere](#)

**Anne Dallmeyer**, Laura Schild, Martin Claussen, Thomas Kleinen, and Ulrike Herzsuh

Fri, 02 May, 11:30–11:40 (CEST) Room 0.31/32 EGU25-16593 | Orals | [ITS2.2/CL0.16](#)

EGU25-11435 | Orals | [CL4.11](#)

[Different time scales in the transient response of the ocean carbon and oxygen cycles to deglacial climate change](#)

**Bo Liu**, Eva Rückert, and Tatiana Ilyina Fri, 02 May, 14:53–15:03 (CEST) Room 0.49/50

**Poster**

EGU25-12537 | **ECS** | Posters on site | [CL2.2](#)

[Tropical Pacific climate variability and Atlantic–Pacific teleconnections under Holocene and Last Interglacial forcings](#)

**Donghao Li**, Matthias Prange, Michael Schulz, Thomas Felis, and Ute Merkel

Wed, 30 Apr, 10:45–12:30 (CEST) Hall X5 | X5.126

EGU25-954 | **ECS** | Posters on site | [CL4.2](#)

[How gateways shape the world – An ocean perspective on the Eocene-Oligocene-Transition](#)

**Hanna Knahl**, Katharina Hochmuth, Lu Niu, Lars Ackermann, Gerrit Lohmann,

Johann Klages, Nicholas Golledge, and Uta Krebs-Kanzow

Thu, 01 May, 14:00–15:45 (CEST) Hall X5 | X5.189

EGU25-8946 | **ECS** | Posters on site | [CL4.11](#)

[Impact of Past AMOC Disruptions on Ocean Oxygenation](#)

**Eva M. Rückert**, Bo Liu, and Tatiana Ilyina

Fri, 02 May, 10:45–12:30 (CEST) Hall X5 | X5.239

EGU25-20327 | Posters on site | [CL4.11](#)

[Insights from AWIESM-wiso: climate and water isotope signals in northern Africa in a precession cycle](#)

**Xiaoxu Shi**, Martin Werner, Hu Yang, Qinggang Gao, Jiping Liu, and Gerrit Lohmann

Fri, 02 May, 10:45–12:30 (CEST) Hall X5 | X5.244

EGU25-3861 | Posters on site | [CL4.11](#)

[Advancing Climate System Understanding: Insights from the PalMod Project](#)

**Kerstin Fieg**, Mojib Latif, Michael Schulz, and Tatiana Ilyina

Fri, 02 May, 10:45–12:30 (CEST) Hall X5 | X5.232