



Working-group proposal

#6 Establishing a paleo-framework for natESM

Submitted on 31.03.2026

1. Summary

This working group aims to collect and share information on the requirements for and technical readiness of the natESM core components for modeling the long-term and abrupt climate change that is documented in the palaeoclimate record.

2. General information

Estimated duration: 12 months

Responsible contact and working-group lead: Kira Rehfeld (U Tübingen); Email: kira.rehfeld@uni-tuebingen.de

WG-members:

Bodo Ahrens (U Frankfurt)	Kai Logemann (Hereon)
Torsten Albrecht (MPI-GEA/PIK)	Ute Merkel (MARUM/U Bremen)
Georg Feulner (PIK)	Matthias Prange (MARUM/U Bremen)
Johann Jungclaus (MPI-M)	Christopher Roth (KIT)
Thomas Kleinen (MPI-M)	Michael Schulz (MARUM/U Bremen)
Fanni Kelemen (U Frankfurt)	Christian Stepanek (AWI)
Volker Klemann (GFZ)	Sergey Sukov (FZJ/JSC)
Martin Köhler (DWD)	Sebastian Wagner (Hereon)
Daniel Krüger (DWD)	Nils Weitzel (TU Dortmund)
Carsten Lemmen (Hereon)	Matteo Willeit (PIK)
Stephan Lorenz (MPI-M)	

👉 We're open to additional members! Interested colleagues are invited to contact WG lead Kira Rehfeld.

KickOff: 24.02.26

Expected WG-dissolution: 31.3.2027

3. Working-group objectives

Establish regular discussion and exchange formats that offer the following:

1. **Information and discussion** on the technical requirements for and status of natESM components and modules for palaeo applications for deep-time (i.e., million-years ago) simulations as well as the more recent past (e.g., past 2000 years, last Interglacial)
2. A forum to **determine ICON model scaling** for palaeoclimate configurations
3. A framework to **exchange and improve datasets** around configurations of ICON that are suitable for palaeoclimate and palaeoenvironmental research.