

PalMod1 products by Paleoclimate Dynamics @AWI

Product item (simulation or other data product)	contact for data queries	publication/remarks	individual components of the data product	data available via	data location	data citation (if applicable)
Geology datasets in North America, Greenland and surrounding areas for use with ice sheet models	Evan.Gowan@awi.de	Gowan, E., Niu, L., Knorr, G., and Lohmann, G. (2019): Geology datasets in North America, Greenland and surrounding areas for use with ice sheet models, Earth System Science Data, 11, 375-391. doi:10.5194/essd-11-375-2019	data files for the sediment properties (distribution and grain size) and bedrock geology for the areas covered by North American ice sheets (including Greenland and Iceland)	https://doi.org/10.1594/PANGAEA.895889		
LGM mean climate state and HS-1 with MPI-ESM, version 1.2.00p4	GongXun.Allen@awi.de	Gong, X., Lembke-Jene, L., Lohmann, G., Knorr, G., Tiedemann, R., Zou, J., and Shi, X. (2019): Enhanced North Pacific deep-ocean stratification by stronger intermediate water formation during Heinrich Stadial 1, Nature Communications, 10, 656. doi:10.1038/s41467-019-08606-2	quasi-equilibrium LGM climate state; HS-1 mimicked by 0.8 Sv FWP to the North Atlantic Ice-Rafted Debris belt region (40°N–55°N, 45°W–20°W)	ask contact person		
PI climate state with AWI-ESM-1.1	Xiaoxu.Shi@awi.de	Shi, X., Lohmann, G., Sidorenko, D., and Yang, H. (2020) Early-Holocene simulations using different forcings and resolutions in AWI-ESM, the Holocene, https://doi.org/10.1177/0959683620908634	PI1 (pre-Industrial climate)	ask contact person	at DKRZ on mistral: /work/ik1017/CMIP6/data/CMIP6/CMIP/AWI/AWI-ESM-1-1-LR/piControl	Danek, Christopher; Shi, Xiaoxu; Stepanek, Christian; Yang, Hu; Barbi, Dirk; Hegewald, Jan; Lohmann, Gerrit (2020). AWI AWI-ESM1.1LR model output prepared for CMIP6 CMIP piControl. Earth System Grid Federation. doi: https://doi.org/10.22033/ESGF/CMIP6.9335 .
Early-Holocene climate state with AWI-ESM-1.1	Xiaoxu.Shi@awi.de	Shi, X., Lohmann, G., Sidorenko, D., and Yang, H. (2020) Early-Holocene simulations using different forcings and resolutions in AWI-ESM, the Holocene, https://doi.org/10.1177/0959683620908634	9k (early-Holocene climate based on the ICE6G reconstruction)	ask contact person	at DKRZ on mistral: /work/bm1021/a270064/esm-experiments/ehg	
LGM climate state with AWI-ESM-1.1 based on GLAC1D	Xiaoxu.Shi@awi.de	not published	LGM, GLAC1D (LGM climate based on the GLAC1D reconstruction)	ask contact person	at DKRZ on mistral: /work/bm1021/a270064/esm-experiments/g21k_new	
LGM climate state with AWI-ESM-1.1 based on ICE6G-21 ka	Xiaoxu.Shi@awi.de	not published	LGM1 (LGM climate based on the ICE6G reconstruction)	ask contact person	at DKRZ on mistral: /work/ik1017/CMIP6/data/CMIP6/PMIP/AWI/AWI-ESM-1-1-LR/lgm/	Shi, Xiaoxu; Yang, Hu; Danek, Christopher; Lohmann, Gerrit (2020). AWI AWI-ESM1.1LR model output prepared for CMIP6 PMIP lgm. Earth System Grid Federation. doi: https://doi.org/10.22033/ESGF/CMIP6.9330 .
Mid-Holocene climate state with AWI-ESM-1.1	Xiaoxu.Shi@awi.de	not published	the same as PI	ask contact person	at DKRZ on mistral: /work/bm1021/a270064/esm-experiments/mh_new	
Last Interglacial (127 ka) climate state with AWI-ESM-1.1	Xiaoxu.Shi@awi.de	not published	the same as PI	ask contact person	at DKRZ on mistral: /work/ik1017/CMIP6/data/CMIP6/PMIP/AWI/AWI-ESM-1-1-LR/lg127k	Shi, Xiaoxu; Yang, Hu; Danek, Christopher; Lohmann, Gerrit (2020). AWI AWI-ESM1.1LR model output prepared for CMIP6 PMIP lg127k. Earth System Grid Federation. doi: https://doi.org/10.22033/ESGF/CMIP6.9331
LGM climate state with AWI-ESM-1.2 based on fully coupled simulation with PISM	Paul.Gierz@awi.de	not published	Initialization from PISM1.1 Index run from 21 ka BP Snapshot for PISM, initialization from Xiaoxu's LGM run with ICE6G from climate; coupling every 3 years (Note unrealistic ice growth due to bias in climate model)	ask contact person		
Mid Holocene Simulation with AWI-ESM-1-2 based on fully coupled simulation with PISM	paul.gierz@awi.de	Gierz et al., 2020 GMD (in review)		ask contact person	at DKRZ on mistral: /work/ba0989/a270077/coupled_ice_paper	
Last Interglacial Simulation with AWI-ESM-1-2 based on fully coupled simulation with PISM	paul.gierz@awi.de	Gierz et al., 2020 GMD (in review)		ask contact person	at DKRZ on mistral: /work/ba0989/a270077/coupled_ice_paper	
PI climate state with MPI-ESM-wiso, version 1.2.01p1	Alexandre.Cauquoin@awi.de , cauquoin@iis.u-tokyo.ac.jp	Cauquoin, A., Werner, M., and Lohmann, G. (2019): Water isotopes – climate relationships for the mid-Holocene and preindustrial period simulated with an isotope-enabled version of MPI-ESM, Clim. Past, 15, 1913–1937, https://doi.org/10.5194/cp-15-1913-2019 .	piControl_wiso_1.2.01p1 (pre-Industrial with water isotopes)	ask contact person		Cauquoin, Alexandre; Werner, Martin; Lohmann, Gerrit (2020): MPI-ESM-wiso simulations data for preindustrial and mid-Holocene conditions. PANGAEA, https://doi.org/10.1594/PANGAEA.912258
Mid-Holocene climate state with MPI-ESM-wiso, version 1.2.01p1	Alexandre.Cauquoin@awi.de , cauquoin@iis.u-tokyo.ac.jp	Cauquoin, A., Werner, M., and Lohmann, G. (2019): Water isotopes – climate relationships for the mid-Holocene and preindustrial period simulated with an isotope-enabled version of MPI-ESM, Clim. Past, 15, 1913–1937, https://doi.org/10.5194/cp-15-1913-2019 .	HOL_6k_wiso_1.2.01p1 (mid Holocene with water isotopes)	ask contact person		Cauquoin, Alexandre; Werner, Martin; Lohmann, Gerrit (2020): MPI-ESM-wiso simulations data for preindustrial and mid-Holocene conditions. PANGAEA, https://doi.org/10.1594/PANGAEA.912258
Last Interglacial (127 ka) climate state with MPI-ESM-wiso, version 1.2.01p1	Alexandre.Cauquoin@awi.de , cauquoin@iis.u-tokyo.ac.jp	not published	LIG_127k_wiso_1.2.01p1 (LIG with water isotopes)	ask contact person		
PI climate state with MPI-ESM-wiso, version 1.2.01p5	Alexandre.Cauquoin@awi.de , cauquoin@iis.u-tokyo.ac.jp	not published	piControl_wiso_1.2.01p5 (pre-Industrial with water isotopes)	ask contact person		
LGM climate state with a weak AMOC initialized from a glacial ocean state, ECHAM5/JSBACH/MP10M	Xu.Zhang@awi.de	Zhang, X., Lohmann, G., Knorr, G., and Xu, X. (2013): Different ocean states and transient characteristics in Last Glacial Maximum simulations and implications for deglaciation, Climate of the Past, 9, 2319-2333. doi:10.5194/cp-9-2319-2013	LGM-W (LGM with a weak AMOC, initialized from a glacial ocean state)	ask contact person	at AWI, NEX SC-ACE (stan)	
ice sheet transient run (ISTran45), ECHAM5/JSBACH/MP10M	Xu.Zhang@awi.de	Zhang, X., Lohmann, G., Knorr, G., and Purcell, C. (2014): Abrupt glacial climate shifts controlled by ice sheet changes, Nature, 512 (7514), pp. 290-294. doi:10.1038/nature13592	ISTran45	ask contact person	at AWI, NEX SC-ACE (stan)	
CO2 transient run with 0.15 Sv NA hosing under LGM conditions, ECHAM5/JSBACH/MP10M	Xu.Zhang@awi.de	Zhang, X., Knorr, G., Lohmann, G., and Barker, S. (2017): Abrupt North Atlantic circulation changes in response to gradual CO2 forcing in a glacial climate state, Nature Geoscience, 10, 518-523. doi:10.1038/ngeo2974	co2L015a	ask contact person	at AWI, NEX SC-ACE (stan)	
CO2 transient run with 0.15 Sv NA hosing under LGM conditions, ECHAM5/JSBACH/MP10M	Xu.Zhang@awi.de	Zhang, X., Knorr, G., Lohmann, G., and Barker, S. (2017): Abrupt North Atlantic circulation changes in response to gradual CO2 forcing in a glacial climate state, Nature Geoscience, 10, 518-523. doi:10.1038/ngeo2974	co2L015b	ask contact person	at AWI, NEX SC-ACE (stan)	

CO2 transient run under 20% NHIS boundary conditions, ECHAM5/JSBACH/MPiOM	Xu.Zhang@awi.de	Zhang, X., Knorr, G., Lohmann, G., and Barker, S. (2017): Abrupt North Atlantic circulation changes in response to gradual CO2 forcing in a glacial climate state, Nature Geoscience, 10, 518-523. doi:10.1038/ngeo2974	NHIS02_c	ask contact person	at AWI, NEX SC-ACE (stan)
CO2 transient run under 20% NHIS boundary conditions, ECHAM5/JSBACH/MPiOM	Xu.Zhang@awi.de	Zhang, X., Knorr, G., Lohmann, G., and Barker, S. (2017): Abrupt North Atlantic circulation changes in response to gradual CO2 forcing in a glacial climate state, Nature Geoscience, 10, 518-523. doi:10.1038/ngeo2974	NHIS02_d	ask contact person	at AWI, NEX SC-ACE (stan) at AWI, NEX SC-ACE (stan): /ace/user/ysun/COSMOS-ace/cosmos-aso/TRN16ka
transient simulation in the last deglaciation (based on GLAC1D)	Yuchen.Sun@awi.de	not published	TRN16ka	ask contact person	at AWI, NEX SC-ACE (stan): /ace/user/ysun/COSMOS-ace/cosmos-aso/TRN16k3c
transient simulation co2 (based on 16ka boundary conditions from GLAC1D)	Yuchen.Sun@awi.de	not published	TRN16k3c	ask contact person	at DKRZ on mistral: /work/ba1066/a270124/esm-experiments/awicm_pism/CMIP6_HIST
Historical simulations (1850-2005) with AWI-ESM-1.2 based on fully coupled simulation with PISM	lars.ackermann@awi.de	Ackermann et al. 2020 GRL (in review), dataset: https://doi.org/10.1594/PANGAEA.916162	CMIP6_HIST	ask contact person	at DKRZ on mistral: /work/ba1066/a270124/esm-experiments/awicm_pism/RCP45_uncoupled
RCP4.5 simulation (2006-2200) with AWI-ESM-1.1	lars.ackermann@awi.de	Ackermann et al. 2020 GRL (in review), dataset: https://doi.org/10.1594/PANGAEA.916162	RCP45_uncoupled	ask contact person	at DKRZ on mistral: /work/ba0989/a270124/esm-experiments/awicm_pism/RCP45.....AND..... /work/ba0989/a270124/esm-experiments/awicm_pism/RCP45_cont_from_2059
RCP4.5 simulation (2006-2200) with AWI-ESM-1.2 based on fully coupled simulation with PISM	lars.ackermann@awi.de	Ackermann et al. 2020 GRL (in review), dataset: https://doi.org/10.1594/PANGAEA.916162	RCP45	ask contact person	at DKRZ on mistral: /work/ba1066/a270124/esm-experiments/awicm_pism/RCP85_uncoupled02
RCP8.5 simulation (2006-2200) with AWI-ESM-1.1	lars.ackermann@awi.de	Ackermann et al. 2020 GRL (in review), dataset: https://doi.org/10.1594/PANGAEA.916162	RCP85_uncoupled02	ask contact person	at DKRZ on mistral: /work/ba1066/a270124/esm-experiments/awicm_pism/RCP85
RCP8.5 simulation (2006-2200) with AWI-ESM-1.2 based on fully coupled simulation with PISM	lars.ackermann@awi.de	Ackermann et al. 2020 GRL (in review), dataset: https://doi.org/10.1594/PANGAEA.916162	RCP85	ask contact person	
PalMod I by @MARUM					
Simulation, CESM, Paleo-time slices, global dataset, PI, -15ky, -21ky, -35ky	mprange@marum.de , umerkel@marum.de	Ref.: Bakker, P., I. Rogozhina, U. Merkel, and M. Prange, 2020: Hypersensitivity of glacial temperatures in Siberia. Climate of the Past, 16, 371-386, doi:10.5194/cp-16-371-2020.	PalMod I WP1.3, D2	personal contact	PANGEA
Simulations, CESM sensitivity experiments (GHG, ice sheets, vegetation), global, PI, -15ky, -21ky, -35 ky	mprange@marum.de umerkel@marum.de	Ref.: Bakker, P., I. Rogozhina, U. Merkel, and M. Prange, 2020: Hypersensitivity of glacial temperatures in Siberia. Climate of the Past, 16, 371-386, doi:10.5194/cp-16-371-2020.	PalMod I WP1.3, D2, 4	personal contact	PANGEA
Simulations, CESM (hosing experiments), global, PI, -15ky, -21ky, -35 ky	mprange@marum.de umerkel@marum.de	Ref.: Bakker, P., I. Rogozhina, U. Merkel, and M. Prange, 2020: Hypersensitivity of glacial temperatures in Siberia. Climate of the Past, 16, 371-386, doi:10.5194/cp-16-371-2020.	PalMod I WP1.3, D4	personal contact	PANGEA
PalMod I by @MPI-M					
Simulation, MPI-ESM, global, transient, -25 ky to future	thomas.kleinen@mpimet.mpg.de			mail to thomas.kleinen@mpimet.mpg.de	