Christopher Danek iD ℚ ≣

Personal Data

Place and Date of Birth:	Berlin, Germany | July 31, 1987
Address:	Geibelstr. 20, 28215 Bremen, Germany
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Work Experience

Since 2020	**PostDoc** in PLOT – Paleolimnological Transect project at the Alfred Wegener Institute Transient Holocene simulations with coupled climate model COSMOS High-resolution stable isotope records from Siberian lake diatoms Head: Dr. Martin Werner iD
Aug 2019 – Dec 2019	**PostDoc** in PalMod – Paleoclimate Modeling project at the Alfred Wegener Institute Setup, performing, CMORization and maintenance of CMIP6 and PMIP4 experiments with the coupled climate model AWI-ESM Head: Prof. Dr. Gerrit Lohmann iD
Mar 2015 – Jul 2019	**PhD** (Dr. rer. nat) at the Physics department of Bremen University and the Alfred Wegener Institute High-resolution hindcast simulations with global ocean model FESOM Small-scale ocean dynamics and energy budgets of North Atlantic and Labrador Sea Thesis: Modeling the North Atlantic and Labrador Sea dynamics with the global high-resolution ocean model FESOM Supervision: Dr. Patrick Scholz iD and Prof. Dr. Gerrit Lohmann iD
Summer 2015	**Teaching** master degree course "Climate Dynamics II" of the Postgraduate Programme Environmental Physics, Bremen University Head: Prof. Dr. Gerrit Lohmann iD

Peer-reviewed Publications

2021	*(in prep)* Semmler, T. iD, Goessling, H. iD, Sidorenko, D. iD, Koldunov, N. iD, **Danek, C.** iD and J. Jungclaus iD: Ocean model formulation influences climate sensitivity. *(in prep)* **Danek, C.** iD, Werner, M. iD, Meyer, H. iD, et al.: Modelling hydrological changes along the PLOT transect during the Holocene. *Journal of Quaternary Science* *(in prep)* **Danek, C.** iD, Scholz, P. iD and G. Lohmann iD: Decadal variability of turbulence and eddy temperature fluxes in the Labrador Sea. *Geophysical Research Letters* *(submitted)* Keeble, J., **Danek, C.** iD, et al.: Evaluating stratospheric ozone and water vapor changes in CMIP6 models from 1850-2100. *Atmospheric Chemistry and Physics*
2020	Ackermann, L. iD, **Danek, C.** iD, Gierz, P. iD and G. Lohmann iD: AMOC Recovery in a Multicentennial Scenario Using a Coupled Atmosphere-Ocean-Ice Sheet Model. *Geophysical Research Letters*, 47, https://doi.org/10.1029/2019GL086810

| 2019 | **Danek, C.** (iD), Scholz, P. (iD) and G. Lohmann (iD): Effects of High Resolution and Spinup Time on Modeled North Atlantic Circulation. *Journal of Physical Oceanography*, 49 (5), 1159–1181, https://doi.org/10.1175/JPO-D-18-0141.1 |

Peer-reviewed Datasets

| 2020 | Shi, X. (iD), Yang, H. (iD), **Danek, C.** (iD) and G. Lohmann (iD): AWI AWI-ESM1.1LR model output prepared for CMIP6 PMIP. Earth System Grid Federation, https://doi.org/10.22033/ESGF/CMIP6.9302 |
| | **Danek, C.** (iD), Shi, X. (iD), Stepanek, C. (iD), Yang, H. (iD), Barbi, D. (iD), Hegewald, J. (iD) and G. Lohmann (iD): AWI AWI-ESM1.1LR model output prepared for CMIP6 CMIP. Earth System Grid Federation, https://doi.org/10.22033/ESGF/CMIP6.9301 |

Methods

Geophysical data analysis and visualization in any Unix-like environment or Microsoft using

R, git ⚙, LaTeX, CDO, NCO, Bash, stackoverflow ▤, Inkscape, GIMP, LibreOffice or MS Office, Octave or MATLAB, NCL, Python, QGIS or ArcGIS

I worked with various observational/reanalysis data and geophysical models of different institutions:

AWI: FESOM – Finite Element Sea ice–Ocean Model

MPI: ECHAM, JSBACH, MPI-OM

NCAR: CLM – Community Land Model

I prefer open source infrastructure and software if possible and speak

German (first language), English (fluent) and French (basics)

University

Oct 2012 – Dec 2014	**Master of Science** in Physics of Earth and Atmosphere at the Geological Sciences department, Bonn University, Germany (GPA: 1.4)
	Thesis: Bayesian Formulation of Uncertainty in Paleoclimate Reconstructions - A Tree Ring Width Case Study
	Grade: 1.0; Supervision: Dr. Burkhard Neuwirth (iD) and Prof. Dr. Andreas Hense (iD)

Mar 2014 – Dec 2014	**Student assistant** at HErZ – Hans-Ertel-Centre for Weather Research, Bonn University
	Validation of Numerical Weather Prediction model reanalysis data COSMO-REA2
	Head: Dr. Sabrina Wahl (iD) and Dr. Jan Keller (iD)

| Fall 2013 | **Exchange Semester** in Meteorological Engineering at the Aeronautics and Astronautics department, İstanbul Teknik Üniversitesi (Istanbul Technical University), Turkey |

| Mar 2012 – Jul 2013 | **Student assistant** at TR32 – Transregional Collaborative Research Centre 32, Department of Meteorology, Bonn University |
| | Work with MODIS remote sensing landuse and CLM model data |

Head: Dr. Prabhakar Shrestha ⬤ and Prof. Dr. Clemens Simmer ⬤

Oct 2008 – Sep 2012	**Bachelor of Science** in Physical Geography at the Department of Geography, Bonn University, Germany (GPA: 2.1) Majors in Meteorology & Geology Thesis: Multi-Modell-Analyse zur Klimaänderung der Nordatlantischen Oszillation im 21. Jahrhundert Grade: 2.0; Supervision: Dr. Roland Pape and Prof. Dr. Andreas Hense ⬤
Feb – Mar 2011	**Internship** at LANUV NRW – State Agency for Nature, Environment, and Consumer Protection, Essen, Germany Planning of low emission zones in German Ruhr area to reduce urban air pollution Head: Dr. Sabine Wurzler
Sep 2010 – Feb 2011	**Student assistant** in Climatology and Landscape Ecology, Department of Geography, Bonn University Field work in mountainous area of Norway, dendrochronological and biogeochemical analysis of dwarf shrubs Head: Dr. Roland Pape and Prof. Dr. Jörg Löffler

Bremen, February 1, 2021