

Jan Zibell

German, resident status C for Switzerland

Education

- 06/2022 - today **Doctoral Student in Atmospheric and Climate Science**
ETH Zürich
Thesis title: "The relationship between extratropical atmospheric heat transport and cyclones across different climates"
- 02/2020 - 05/2022 **Master of Science in Physics**
ETH Zürich
• Master's Thesis at the Institute for Atmospheric and Climate Science:

"Processes governing the North Atlantic sea surface temperature responses to planetary-scale forestation and deforestation"
• SemesterprojectattheInstituteforAtmosphericandClimateScience:
"Analysis of ENSO Representation Metrics for CMIP6 Climate Model Projection Weighting"
- 09/2016 - 02/2020 **Bachelor of Science in Physics**
ETH Zürich

Experience

- 06/2022 - today **ETH Zürich**
Doctoral student in the Atmospheric Circulation group of Sebastian Schemm
• Collaboratingonaprojecttostudycyclonecharacteristicsinpresentandfutureclimate
• Analysingidealizedmodelsimulationstoinvestigatestormtracksunderclimaticchanges
• Supervision of two Master's theses on the remote influence of forest cover over North America
• SupervisionofoneBachelor'sthesisoncycloneenergeticsinfutureclimatesimulations
• Teachingassistantforvariouslecturecoursesandlabcoursesinthefieldofweatherand climate science
- 09/2020 - 11/2020 **Jicamarca Radio Observatory, Lima, Peru**
IAESTE Research Intern
• Contributingtothepython-basedprocessingbookcaseSignalchain
• OptimizationandcorrectionoftheFSA(FullSpectralAnalysis)methodforwindestimation
• Developmentofscriptsforreal-timewindestimationwithCLAIREradar

Extracurricular Activities

- 2021 PromotingcoursesrelatedtosustainabilitywithinthephysicscurriculumatETHZürichas member of the Student Sustainability Commission (SSC)
- 2020-today Partofthe"WhoCares?"studentprojectpromotingsustainabilityinearlycareerchoices

Skills

- Languages
- German(Native)
 - English(Proficient)
 - French(Intermediate,DelfB1certificate)
 - Spanish(Beginner)

Programming Experience Python, cdo, nco, LaTeX, bash, Fortran, C++

Publications

Inreview Zibell,J.,Hermoso,A.,Donohoe,A.,andSchemm,S.:Relatingextratropicalatmospheric heat transport to cyclone life cycle characteristics and numbers in Southern Hemispheric winter, EGU sphere [preprint], <https://doi.org/10.5194/egusphere-2025-2314>.

2025 Bauer,V.M.,Schemm,S.,Portmann,R.,Zhang,J.,Eirund,G.K.,DeHertog,S.J.,andZibell, J.: Impacts of North American forest cover changes on the North Atlantic Ocean circulation, Earth Syst. Dynam., 16, 379–409, <https://doi.org/10.5194/esd-16-379-2025>.

Research Visits

05/2025 Research visit at the Institute of Meteorology at the Freie Universität Berlin, Berlin, Germany. Seminar on "Relating extratropical atmospheric heat transport to cyclone numbers"

09-10/2024 Visiting student intern at the Applied Physics Laboratory and the Department of Atmospheric and Climate Science at the University of Washington, Seattle, US. Seminars on "Mid-latitude Moist Static Energy Transport And Cyclones" and "Impacts of North American forest cover changes on the North Atlantic ocean circulation"

Poster presentations

10/2024 Cyclone Workshop in St. Sauveur, Quebec, Canada: "Distribution of transient eddy moist static energy flux across extratropical cyclones in present and future climate"

04/2024 EGU General Assembly, Vienna, Austria: "Linking midlatitude transient eddy moist static energy transport and extratropical cyclones"

09/2023 C2SMS Summer School on Monte Verità, Ascona, Switzerland: "The role of latent heating for midlatitude storm tracks: From global-scale atmospheric heat transport to synoptic-scale extratropical cyclone characteristics"

04/2023 EGU General Assembly, Vienna, Austria: "Combining global-scale atmospheric heat transport and synoptic-scale extratropical cyclone characteristics to understand the role of latent heating for midlatitude storm tracks"

02/2023 ICON User Workshop in Dübendorf, Switzerland: "Moisture and storm tracks in idealized climate simulations"