

Kathrin Alber

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EDUCATION

University at Albany, SUNY, Albany, NY, USA <i>Ph.D. Student, Department of Atmospheric and Environmental Science (DAES)</i> <i>Advisor: Dr. Liming Zhou</i>	09/2019-present
George Mason University, Fairfax, VA, USA <i>M.S. Thesis, Atmospheric, Oceanic & Earth Sciences Department (AOES)</i> <i>Advisor: Dr. Kathy Pegion</i>	08/2017-08/2018
University of Basel, Switzerland <i>M.S. in Geoscience, Department of Atmospheric Sciences</i> <i>Advisor: Dr. Eberhard Parlow</i>	01/2016-01/2019
University of Basel, Switzerland <i>B.S. in Geoscience, Department of Atmospheric Sciences</i> <i>Advisor: Dr. Eberhard Parlow</i>	08/2012-01/2016

RESEARCH EXPERIENCE

Graduate Research Assistant <i>DAES, University at Albany</i> <ul style="list-style-type: none">Analyzing thunderstorm activity and trends over the Congo RainforestInvestigating changes in the timing and intensity of the diurnal cycle of convection over the Congo RainforestAssessing the effects of drying trend and different modes of variability on the diurnal cycle of convection over the Congo RainforestPassed Ph.D. qualification exam (Dec 2020) and Ph.D. prospectus (Nov 2021)	09/2019-present
Research Investigator <i>AOES, George Mason University</i> <ul style="list-style-type: none">Analyzed the predictability of the North Atlantic Oscillation	08/2017-08/2018
Research Investigator <i>Gobabeb Research and Training Centre, Namibia</i> <ul style="list-style-type: none">Quantified fog distribution in the Namib desert	08/2015-09/2015

PUBLICATIONS

Peer-reviewed:

Alber, K., Raghavendra, A., Zhou, L. et al., 2021. Analyzing intensifying thunderstorms over the Congo Basin using the Gálvez-Davison index from 1983–2018. *Clim. Dyn.* 56, 949–967 (2021). <https://doi.org/10.1007/s00382-020-05513-x>

Alber, K., Zhou, L., and Raghavendra, A., 2021. A shift in the diurnal timing and intensity of deep convection over the Congo Basin during the past 40 years. Atmos. Res. 264, 0169-8095.
<https://doi.org/10.1016/j.atmosres.2021.105869>

CONFERENCE PRESENTATIONS

102nd AMS Annual Meeting 2022
A shift in the diurnal timing and intensity of deep convection over the Congo Basin during the past 40 years.
(Oral)

101st AMS Annual Meeting 2021
Analyzing intensifying thunderstorms over the Congo Basin using the Gálvez-Davison index from 1983–2018. (Oral)

HONORS AND AWARDS

Master's Thesis, Zeno Karl Schindler Foundation 2017
Master's Thesis, Karitative Stiftung Dr. Gerber-ten Bosch 2017

INTERNSHIPS

Meteotest, Bern, Switzerland 08/2018-02/2019

Internship weather forecasting

- Analyzed weather patterns using different models
- Issued daily written weather forecasts for newspapers, TV channels, and websites
- Performed multiple live weather radio interviews every day
- Provided personalized weather information on the phone for individual people, helicopter operations, and mountaineers
- Taught weather, climate, and natural disaster classes for elementary school classes
- Prepared weather reports for insurance companies

MeteoNews, Zürich, Switzerland 10/2015-03/2016

Internship weather forecasting

- Analyzed weather patterns using different models
- Issued daily written weather forecasts for newspapers, TV channels, and websites

WORKSHOPS AND SUMMER SCHOOLS

NCAR Trustworthy Artificial Intelligence for Environmental Science (TAI4ES) 06/2022
▪ Summer school on developing trustworthy AI for the earth and environmental sciences

TECHNICAL SKILLS

Programming: MATLAB, Python, GrADS, Linux shell scripting
Datasets: ERA-Interim, ERA5, GridSat-B1, MODIS, MERRA-2, NOAA CPC, TRMM, IMERG, GLEAM, CMORPH
Models: Weather Research and Forecasting Model (WRF)

Version control: Git, Github
Platforms: Mac, Windows, Linux

SERVICE AND OUTREACH

PROFESSIONAL

Journal Reviewer: Journal of Climate, Journal of Applied Meteorology and Climatology, Atmospheric Research, Climate Dynamics

Session Co-Chair: AMS 102nd annual meeting, Session 8A African Climate Variability and Change 2022

UNIVERSITY AT ALBANY

Organizer: DAES Climate group weekly meetings 2020-2021

UNIVERSITY OF BASEL

Mentor: Open lecture auditorium for refugees and asylum seekers 2017

VOLUNTEER EXPERIENCE

Adirondack Mountain Rescue

- Technical rescue committee member 2022-present
- Active field member 2022-present

Thacher Climbing Coalition

- Board member 2021-present
- Membership chair 2020-present

Swiss Alpine Club

- Climbing and mountaineering guide for children and young adults 2014-2019

LANGUAGES

German (Native), English (Fluent), Spanish (Proficient), French (Conversational), Norwegian (Basic)

PROFESSIONAL AFFILIATIONS

Canadian Avalanche Association 2022-present
American Avalanche Association 2022-present
American Meteorological Association 2020-present

OTHER CERTIFICATIONS

Wilderness First Responder 2022

The American Institute for Avalanche Research and Education (AIARE)

- AIARE Avalanche Rescue 2022
- AIARE 1 2021