# **Kathrin Alber**

Department of Atmospheric and Environmental Sciences University at Albany, State University of New York 1400 Washington Avenue, Albany, NY 12222

> https://kathrinalber.github.io kalber2@albany.edu

#### **EDUCATION**

# University at Albany, SUNY, Albany, NY, USA

09/2019-present

Ph.D. Student, Department of Atmospheric and Environmental Science (DAES)

Advisor: Dr. Liming Zhou

# George Mason University, Fairfax, VA, USA

08/2017-08/2018

M.S. Thesis, Atmospheric, Oceanic & Earth Sciences Department (AOES)

Advisor: Dr. Kathy Pegion

# University of Basel, Switzerland

01/2016-01/2019

M.S. in Geoscience, Department of Atmospheric Sciences

Advisor: Dr. Eberhard Parlow

# University of Basel, Switzerland

08/2012-01/2016

B.S. in Geoscience, Department of Atmospheric Sciences

Advisor: Dr. Eberhard Parlow

#### RESEARCH EXPERIENCE

### **Graduate Research Assistant**

09/2019-present

DAES, University at Albany

- Analyzing thunderstorm activity and trends over the Congo Rainforest
- Investigating changes in the timing and intensity of the diurnal cycle of convection over the Congo Rainforest
- Assessing the effects of drying trend and different modes of variability on the diurnal cycle of convection over the Congo Rainforest

#### **Research Investigator**

08/2017-08/2018

AOES, George Mason University

Analyzed the predictability of the North Atlantic Oscillation

# **Research Investigator**

08/2015-09/2015

Gobabeb Research and Training Centre, Namibia

Quantified fog distribution in the Namib desert

# **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). <a href="https://doi.org/10.1007/s00382-020-05513-x">https://doi.org/10.1007/s00382-020-05513-x</a>

**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

### **101st AMS Annual Meeting**

2021

Analyzing intensifying thunderstorms over the Congo Basin using the Gálvez-Davison index from 1983–2018. (Oral)

# **102<sup>nd</sup> 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**)

#### HONORS AND AWARDS

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

2017

2017

#### **INTERNSHIPS**

# Meteotest, Bern, Switzerland

08/2018-02/2019

Internship weather forecasting

#### MeteNews, Zürich, Switzerland

10/2015-03/2016

Internship weather forecasting

# **TECHNICAL SKILLS**

**Programming:** MATLAB, Python, GrADS, Linux shell scripting **Datasets:** ERA-Interim, ERA5, GridSat-B1, MODIS, MERRA-2,

NOAA CPC, TRMM, IMERG, GLEAM

**Version control:** Git, Github

**Platforms:** Mac, Windows, Linux

# SERVICE AND OUTREACH

#### **PROFESSIONAL**

**Session Co-Chair:** AMS 102<sup>nd</sup> annual meeting, Session 8A African Climate Variability and Change **Instructor:** Lessons about weather, climate, and natural disasters for elementary school classes

2022

### UNIVERSITY AT ALBANY

Organizer: DAES Climate group weekly meetings 2020-2021

#### UNIVERSITY OF BASEL

**Mentor:** Open lecture auditorium for refugees and asylum seekers

# **VOLUNTEER EXPERIENCE**

# **Thacher Climbing Coalition**

Board member
 Membership chair
 2021-present
 2020-present

Swiss Alpine Club 2014-2019

Climbing and mountaineering guide for children and young adults

# **LANGUAGES**

German - Native English - Fluent Spanish - Proficient French - Conversational Norwegian - Basic

# **PROFESSIONAL AFFILIATIONS**

American Meteorological Association 2020-present

# **OTHER CERTIFICATIONS**

**AIARE 1:** The American Institute for Avalanche Research and Education

2021