

# Anna Boser

Bren School of Environmental Science and Management

<https://anna-boser.github.io/>

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## EDUCATION

*University of California*, Santa Barbara, California

Ph.D., Environmental Sciences and Management 2025 (expected)

*Committee:* Kelly Caylor (co-chair), Ashley Larsen (co-chair), and Tamma Carleton

*University of California*, Berkeley, California

B.A. with *Highest Distinction*, Statistics 2020

## AWARDS, FELLOWSHIPS, & HONORS

Kuni Research Fellowship 2022

University Medal, UC Berkeley (most distinguished graduating senior) 2020

National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP) 2020

Eugene Cota-Robles Fellowship, UC Santa Barbara 2020

Undergraduate Research Apprenticeship Program Summer Fellowship, UC Berkeley 2018

## RESEARCH INTERESTS

Ecohydrology, agroecology, machine learning, remote sensing, food security, econometrics, planetary health.

## PUBLICATIONS

### *RESEARCH MANUSCRIPTS*

1. **Boser AS**, Sousa D, Larsen A, MacDonald A. “Micro-climate to macro-risk: mapping fine scale differences in mosquito-borne disease risk using remote sensing.” *Environmental Research Letters*. (2021).
2. Head JR, ... **Boser AS**..., R Justin. “The effect of school closures and reopening strategies on COVID-19 infection dynamics in the San Francisco Bay Area: a cross-sectional survey and modeling analysis.” *MedRxiv* (2020).
3. Mosnier E, Epelboin L, Guiraud N, Huber F, Adriouch L, Guarmit B, **Boser AS**, . . . Nacher, M. “Spatial dynamics and epidemiology for AIDS in remote areas in French Guiana.” *AIDS Care*,1-7 (2018).
4. **Boser AS**, Bidaud B, Maues S, Guiraud N, Mendes AM, Lacapere F Rhodes S, Huber F, Adriouch L, Nacher M, Mosnier E. “Addressing HIV on the French Guianese-Brazilian border: No choice but collaboration!” *AIDS* 32, 539–542 (2018).

### *CONFERENCE PRESENTATIONS AND POSTERS*

1. **Boser AS**, Pascolini-Campbell M, Reager JT. American Geophysical Union. ECOSTRESS detects a 20% increase in evapotranspiration over agricultural lands in California. December 2021. New Orleans, Louisiana.
2. **Boser AS**, Sousa D, Larsen A, MacDonald A. Mosquito-borne disease risk mapping at high spatial and temporal resolutions using remotely sensed land surface temperature measurements. Ecological Society of America. August 2021. Long Beach, California.

3. **Boser AS**, White C, Al-Hamdan M. Using Statistical and Machine Learning Models with Remotely Sensed Data to Estimate PM2.5 in the San Francisco Bay Area. American Geophysical Union. December 1-17 2020. San Francisco, California.
4. **Boser AS**, Evans S, Potts MD. The Effect of Prescribed Burn Smoke on Emergency Department Visits and Hospitalizations in California. 3rd International Smoke Symposium. April 20-24 2020. Davis, California.
5. **Boser AS**, Bidaud B, Adriouch L, Epelboin L, Guiraud N, Gaillet M, Carrera C, Brousse P, Mosnier E. VIH sur la frontière franco-brésilienne: mobilité et précarité sur une région en épidémie généralisée. 18th National Congress of the French Society for the Fight Against AIDS (SFLS). 2017 Oct 19-20. Nice, France.

### **TEACHING AND MENTORSHIP EXPERIENCE**

*University of California, Santa Barbara*

Teaching Assistant, ESM 203: Earth Systems Science	2021
Tutor, Python Class	2022
Mentor, Data Science Capstone Project	2022

### **OTHER ACADEMIC POSITIONS**

Intern, NASA Jet Propulsion Laboratory. Advisors: JT Reager and Madeleine Pascolini-Campbell	2021
Intern, NASA Marshall Space Flight Center. Advisor: Mohammed Al-Hamdan	2020
Research Assistant, UC Berkeley College of Natural Resources. Advisor: Matthew Potts	2019-2020
Research Assistant, UC Berkeley School of Public Health. Advisor: Daniel Perlman	2017-2019

### **PROFESSIONAL SERVICE & MEMBERSHIP**

Member, American Geophysical Union	2020-Present
Member, Ecological Society of America	2020-Present
Reviewer, World Development	2022
Bren Anti-Racism Caucus, UCSB	2021-Present
Bren Seminar Committee, UCSB	2021-2022
Bren PhD Symposium Committee, UCSB	2021

### **MEDIA COVERAGE & OUTREACH**

Invited talk: GS3 Seminar Series, Center for Scientific Computing, UCSB	July 20, 2022
Invited talks: NASA ECOSTRESS Annual Team Meeting	April 12-14, 2022
<i>Micro-climate to macro-risk: Mapping fine scale differences in mosquito-borne disease risk</i>	
<i>Agriculture's effects on evapotranspiration and runoff generation in California</i>	
USGS Earth Resources Observation and Science (EROS) Center "Eyes on Earth" Podcast	June 27, 2022
<i>Episode 76 – ECOSTRESS and Disease Risk</i>	
TEDx Youth Talk: <i>How to Save the Earth from Space</i>	February 29, 2022