

CURRICULUM VITAE

TALIA G. ANDERSON

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| CONTACT | email: taliaa@umn.edu website: https://taliaanderson.github.io/ github: https://github.com/taliaanderson | |
| EDUCATION | UNIVERSITY OF ARIZONA 2024 Ph.D., Geography Dissertation: <i>Rainfall variability, extreme events, and climate information in the Central American Dry Corridor</i> | Tucson, AZ |
| | UNIVERSITY OF ARIZONA 2020 M.A., Geography Thesis: <i>Spatiotemporal peatland productivity and climate relationships across the western South American Altiplano</i> | Tucson, AZ |
| | UNIVERSITY OF MINNESOTA 2016 B.S., Geography (Honors, <i>summa cum laude</i>) B.A., Spanish Studies (Honors) Foreign study at VENUSA Institute of International Studies and Modern Languages (Mérida, Venezuela) Thesis: <i>A 168-year tropical tree-ring record for Abies guatemalensis from Totonicapán, Guatemala: chronology development and the state of the forest</i> | Minneapolis, MN |
| ACADEMIC APPOINTMENTS | | |
| | UNIVERSITY OF MINNESOTA 2025 – Presidential Postdoctoral Fellow in the Department of Geography, Environment & Society | Minneapolis, MN |
| | NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION / UNIVERSITY CENTER FOR ATMOSPHERIC RESEARCH 2024 – 2025 Climate & Global Change Postdoctoral Fellow | Los Angeles, CA |
| | GRADUATE RESEARCH ASSISTANT 2021 – 2024 School of Geography, Development & Environment | Tucson, AZ |
| | GRADUATE RESEARCH ASSISTANT 2017 – 2019 Laboratory of Tree-Ring Research & School of Geography, Development & Environment | Tucson, AZ |
| | UNDERGRADUATE RESEARCH ASSISTANT 2014–2016 University of Minnesota Center for Dendrochronology | Minneapolis, MN |
| OTHER RELEVANT PROFESSIONAL EXPERIENCE | | |
| | TRACE RESEARCH ASSISTANT 2016 – 2017 US Forest Service/International Institute of Tropical Forestry | Luquillo, Puerto Rico |
| | FIELD TECHNICIAN 2016 Luquillo Long-Term Ecological Research (LTER) Site | Rio Grande, Puerto Rico |
| PUBLICATIONS | Peer-Reviewed Papers | |
| | <i>Accepted</i> | |
| | [1] González-Méndez, I., K. J. Anchukaitis, D. Pons, K. Morino, T. G. Anderson , S. Belmecheri, L. Andreu-Hayles, Oxygen isotopes in tree rings track neotropical climate dynamics, <i>Geophysical Research Letters</i> , 2026. | |
| | <i>Published</i> | |
| | [9] Anderson, T. G. , D. Pons, L. Tun, K. J. Anchukaitis, Usability of Seasonal Climate Forecasts in the Guatemalan Dry Corridor, <i>Weather, Climate, and Society</i> , 2026. | |
| | [8] González-Méndez, I., D. Pons, T. G. Anderson , I. Ayes Rivera, K. J. Anchukaitis, Impacts of Spatial and Temporal Station Availability on Gridded Precipitation Products in Central America, <i>Earth and Space Science</i> , 2025. | |

- [7] **Anderson, T. G.**, D. Pons, A. Xuruc, H. Rodríguez, M. J. Taylor, K. J. Anchukaitis, Complexity and mediating factors of farmers' perceptions of climate and agricultural adaptation strategies in the Guatemalan Dry Corridor, *Climatic Change*, 2025.
- [6] **Anderson, T. G.**, K. A. McKinnon, D. Pons, K. J. Anchukaitis, How exceptional was the 2015–2019 Central American drought? *Geophysical Research Letters*, 2023.
- [5] Jennings, L., **T. Anderson**, A. Martinez, R. Sterling, D. David-Chavez, I. Garba, M. Hudson, N. A. Garrison, S. Russo Carroll, Applying the CARE Principles for Indigenous Data Governance to Ecology and Biodiversity Research, *Nature Ecology & Evolution*, 2023.
- [4] **Anderson, T. G.**, D. A. Christie, R. O. Chávez, M. Olea, K. J. Anchukaitis, Spatiotemporal Peatland Productivity and Climate Relationships Across the Western South American Altiplano, *Journal of Geophysical Research – Biogeosciences*, 2021.
- [3] Chávez, R. O., D. A. Christie, M. Olea, **T. G. Anderson**, A Multiscale Productivity Assessment of High Andean Peatlands across the Chilean Altiplano Using 31 Years of Landsat Imagery, *Remote Sensing*, 2019.
- [2] **Anderson, T. G.**, K. J. Anchukaitis, D. Pons, M. J. Taylor, Multiscale trends and precipitation extremes in the Central American Midsummer Drought, *Environmental Research Letters*, 2019.
- [1] **Anderson, T. G.**, D. Griffin, K. J. Anchukaitis, D. Pons, M. J. Taylor, Climate sensitivity and potential vulnerability of *Abies guatemalensis* forests in Totonicapán, Guatemala, *Journal of Latin American Geography*, 2018.

Submitted or In Revision

- [1] **Anderson, T. G.**, K. A. McKinnon, Direct and indirect seasonal forecasts of midsummer Central American rainfall: Regional variability and the role of the Caribbean Low-Level Jet, *Journal of Applied Meteorology and Climatology*, in revision, 2025.

In Preparation

- [1] **Anderson, T. G.**, K. A. McKinnon, I. González-Méndez, D. Pons, K. J. Anchukaitis, Competing mechanisms of moisture transport to eastern Central America, in preparation for *Climate Dynamics*.

Technical Reports

- [2] Anderson, T. G., D. Pons, Variabilidad de las precipitaciones, eventos extremos y vulnerabilidad en sistemas sociales y ambientales heterogéneos, *Project Report for Chiquimula and Totonicapán Agroclimate Roundtable Groups*, 2024
- [1] **Anderson, T. G.**, C. Woodhouse, D. Ferguson, Upper Lake Mary: Lake Level Response to Climate Variability, *Internal Report, Flagstaff Water Services*, 2020.

GRANTS & FELLOWSHIPS

- NOAA Climate & Global Change Postdoctoral Fellowship, 2024
- Marshall Foundation Dissertation Fellowship, 2023
- College of Social & Behavioral Summer Dissertation Fellowship, 2023
- Climate Assessment for the Southwest (CLIMAS) Environment and Society Fellowship, 2023
- University of Arizona Roots for Resilience Research Assistantship in Data Science, 2022
- University of Arizona Carson Scholar Fellowship, 2021
- "Rainfall variability, extreme events, and vulnerability in heterogeneous social and environmental systems", PI: Kevin Anchukaitis, coPIs: Matthew Taylor, Diego Pons, Tom Evans, Diana Liverman, NSF Human-Environment and Geographical Sciences (HEGS), BCS2049657. *As a graduate student, I led the design of the project and writing of the grant. I was funded by this grant from 06/2021–08/2023.*
- PATHWAYS (Partnerships Along The Headwaters of the Americas for Young Scientists) Program Research Grant, Fall 2020
- University of Arizona Professional Opportunities Development Funding Grant, Fall 2020
- American Association of Geographers Climate Specialty Group Student Grant, Fall 2020
- University of Arizona Graduate Student and Professional Council Travel Grant, Fall 2021, Spring 2020, Spring 2018, and Fall 2017
- Conference of Latin American Geographers Student Travel Award, Fall 2019

Fulbright Study and Research Grant, Spring 2018
Mentor: Dr. Duncan Christie (Universidad Austral de Chile)
Project: Spatiotemporal patterns of Andean peatland dynamics across the South American Altiplano
Undergraduate Research Opportunities Program (UROP) Grant, Fall 2015

HONORS & AWARDS

P.E.O. Scholar Award, 2023
Andrew Ellicott Douglass Memorial Scholarship, 2023
University of Arizona College of Science, Laboratory of Tree Ring Research Scholarship Award, 2021
University of Arizona College of Science Galileo Circle Scholarship, 2020
University of Arizona Women in Science and Engineering Excellence Banquet Poster Award, 2020
Alsie French & Edmund Schulman Memorial Scholarship, Spring 2018
10th World Dendrochronology Conference Student Poster Award, 2018
ACTFL Certificate of Advanced Level Proficiency in Spanish, Spring 2016
Talle Family Scholar, Fall 2015–Spring 2016

CONFERENCE PRESENTATIONS

- Anderson, T.**, K. A. McKinnon, I. González-Méndez, D. Pons, K. J. Anchukaitis, Competing mechanisms of moisture transport to eastern Central America, *American Association of Geographers*, San Francisco, California, *upcoming* March 2026.
- Anderson, T.**, K. A. McKinnon, I. González-Méndez, D. Pons, K. J. Anchukaitis, Variability in moisture transport and convection in Central America, *American Geophysical Union*, New Orleans, Louisiana, December 2025.
- González-Méndez, I., K. J. Anchukaitis, D. Pons, K. Morino, **T. Anderson**, L. Andreu-Hayles, Water isotopes in tree rings track neotropical climate dynamics, *American Geophysical Union*, New Orleans, Louisiana, December 2025.
- Anderson, T.**, D. Pons, M. J. Taylor, A. Xuruc, H. Rodríguez-Salvaterra, Z. Guido, J. A. Sullivan, D. Liverman, K. J. Anchukaitis, Complexity and mediating factors in farmers' climate perceptions and agricultural adaptation strategies in the Guatemalan Dry Corridor, *38th Conference of Latin American Geography*, San Juan, Puerto Rico, May 2024.
- Anchukaitis, K. J., Z. K. Sethuraju, D. Pons, J. Edwards, **T. Anderson**, González-Méndez, M. Taylor, Dendrochronological evidence for the impacts of the 1902 Santa María volcanic eruption on the forests of western Guatemala, *12th Cities on Volcanoes conference*, Antigua, Guatemala, February 2024.
- Anderson, T.**, K. A. McKinnon, D. Pons, K. J. Anchukaitis, How Exceptional Was the 2015–2019 Central American Drought?, *American Geophysical Union*, San Francisco, California, December 2023.
- Anderson, T.**, Moving towards co-production and CARE in climate and tree-ring research, *Dendroclimatology Conference: Past, Present, & Future*, invited talk, Tucson, Arizona, May, 2023.
- Anderson, T.**, K. A. McKinnon, D. Pons, K. J. Anchukaitis, How Exceptional Was the 2015–2019 Central American Drought?, *American Association of Geographers*, Denver, Colorado, March 2023.
- Anderson, T.**, K. J. Anchukaitis, K. Morino, D. Pons, D. Griffin, C. Leland, E. Castellanos, M. J. Taylor, Regional & local climate responses in a Central American tree-ring chronology network, *American Association of Geographers*, virtual, March 2021.
- Anderson, T.**, K. J. Anchukaitis, D. Pons, M. J. Taylor, Multiscale trends and regional precipitation extremes in the Central American Midsummer Drought, *Conference of Latin American Geographers*, Antigua, Guatemala, January 2020.
- Anderson, T.**, Spatiotemporal patterns of Andean peatland dynamics across the western South American Altiplano, *Fulbright Chile Scholars' Research Showcase*, Santiago, Chile, November 2018.
- Anderson, T.**, Tree Rings, Climatic Change, and Water Resource Availability in the Altiplano Plateau, *Fulbright Chile Scholars' Research Launch*, Santiago, Chile, March 2018.
- Anderson, T.**, Pinabete y los bosques comunales de Totonicapán: una mirada al pasado para entender el futuro, *Universidad del Valle Progress and Potential in Dendrochronology Conference*, Guatemala City, November 2017.

Anderson, T., Desarrollo de una cronología tropical para *Abies guatemalensis* de Totonicapán, Guatemala, *Curso-Taller: Dendrocronología y sus aplicaciones hidroclimáticas y ecológicas*, Huancayo, Perú, October 2016.

POSTERS

Anderson, T., K. J. Anchukaitis, K. Morino, L. Andreu-Hayles, D. Pons, D. Griffin, E. Castellanos, M. J. Taylor, Multiproxy insights into past climate variability from a Central American tree-ring chronology network, *Graduate Interdisciplinary Program Research Showcase*, Tucson, Arizona, December 2022.

Anderson, T., K. J. Anchukaitis, K. Morino, L. Andreu-Hayles, D. Pons, D. Griffin, E. Castellanos, M. J. Taylor, Multiproxy insights into past climate variability from a Central American tree-ring chronology network, *American Geophysical Union*, New Orleans, Louisiana, December 2021.

Anderson, T., K. J. Anchukaitis, D. Pons, M. J. Taylor, Multiscale trends and regional precipitation extremes in the Central American Midsummer Drought, *Women in Science and Engineering Excellence Banquet*, Tucson, Arizona, January 2020.

Anderson, T., K. J. Anchukaitis, D. Pons, M. J. Taylor, Multiscale trends and precipitation extremes in the Central American Midsummer Drought, *Workshop on Risk Analysis for Extremes in the Earth System*, Berkeley, California, July 2019.

Anderson, T., D. Griffin, K. J. Anchukaitis, D. Pons, M. J. Taylor, Climate sensitivity and potential vulnerability of pinabete (*Abies guatemalensis*) forests in Totonicapán, Guatemala, *10th World Dendrochronology Conference*, Thimphu, Bhutan, June 2018.

Anderson, T., D. Griffin, K. J. Anchukaitis, D. Pons, M. J. Taylor. A 168-year tropical tree-ring chronology for *Abies guatemalensis* from Totonicapán, Guatemala, *University of Minnesota Undergraduate Research Symposium*, Minneapolis, MN, May 2016.

INVITED PUBLIC TALKS

Anderson, T., Climate Variability and Change Across Central America and its Relevance to Agricultural Communities, *P.E.O. Founders' Day Luncheon*, invited keynote, Yuma, Arizona, November 2024.

Anderson, T., Variabilidad de las lluvias, eventos extremos y vulnerabilidad en sistemas sociales y ambientales, *Mesa Técnica Agroclimática Seasonal Climate Outlook Roundtable*, Totonicapán, Guatemala, November 2024.

Anderson, T., Variabilidad de las lluvias, eventos extremos y vulnerabilidad en sistemas sociales y ambientales, *Mesa Técnica Agroclimática Seasonal Climate Outlook Roundtable*, Chiquimula, Guatemala, November 2024.

Anderson, T., Factores mediadores de las percepciones climáticas de agricultores y sus estrategias agrícolas en el Corredor Seco de Guatemala, *Guatemalan Ministry of the Environment and Natural Resources Climate Change and Mobility Roundtable*, Guatemala City, Guatemala, April 2024.

Russo Carroll, S., **T. Anderson**, Transforming Big Data for Indigenous Futures: The CARE Principles of Indigenous Data Governance, *CGIAR Ontologies Community of Practice Webinar*, November 2021.

Anderson, T., C. A. Woodhouse, D. B. Ferguson, Upper Lake Mary: Lake Level Response to Climate Variability, *Flagstaff Water Commission*, Tucson, Arizona, August 2020.

Anderson, T., C. A. Woodhouse, D. B. Ferguson, Upper Lake Mary: Lake Level Response to Climate Variability, *Flagstaff Water Services*, Tucson, Arizona, March 2020.

Anderson, T., Understanding Past, Present, and Future Environments through Tree Rings, *University of Arizona Financial Administrators Outreach Event*, Tucson, Arizona, February 2018.

Anderson, T., Pinabete y los bosques comunales de Totonicapán: una mirada al pasado para entender el futuro, *Totonicapán Community Research Meeting*, Totonicapán, Guatemala, November 2017.

TEACHING

UNIVERSITY OF ARIZONA

Tucson, AZ

School of Geography, Development & Environment

GEOG 230 *Our Changing Climate* Teaching Assistant (Spring 2021)

GEOG 363 *Climate Change: Human Causes, Social Consequences, and Sustainable Responses* Teaching Assistant (Fall 2020)

GEOG 170 *Introduction to Physical Geography* Teaching Assistant (Spring 2019)

FIELD AND OFF-CAMPUS PROGRAMS

Project HEGS Field Researcher Training & Workshop (October 2022)

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| GUEST LECTURES | Anderson, T. , Central American Climate Change & Migration, <i>University of Arizona, Latin American Studies Central American Migration: Root Causes and Lived Experiences</i> , April 2023. Anderson, T. , Central American Climate Change & Migration, <i>University of California, Santa Barbara Interdisciplinary Approaches to the Cultures, Languages, and Literatures of Latin America and Iberia</i> , May 2021. Anderson, T. , Climate Change Impacts, <i>University of Arizona, Climate Change: Human Causes, Social Consequences, and Sustainable Responses</i> , September 2020. Anderson, T. , Climate Change & CO2, <i>University of Arizona, Climate Change: Human Causes, Social Consequences, and Sustainable Responses</i> , September 2020. |
| MENTORING | Graduate Student Thesis Committee Member: Jacob Simon, Master's of Entomology, University of Minnesota, 2025 – Undergraduate mentoring at the Centro Universitario de Oriente and the Centro Universitario de Totonicapán: Karen Berganza Isales, Alex Cutz Morales, Walter Garcia Loyo, Salvador Esquivel Guancín, Rosario Gutiérrez González, Jorge Hurtado Siguachi, Yury Loyo Gutiérrez, Crismely Marroquin Monroy, Sucely Menchú López, Mercedes Paxtor Cux, Thannia Ramos Archila, Betsie Sancé Nonés, Esmeralda Tzubán González, Danny Valdés Guerra, 2022–2023 |
| SERVICE | Professional reviewer of journal manuscripts for: Climate Dynamics, Quarterly Journal of the Royal Meteorological Society, Atmósfera, PLOS ONE, Weather and Climate Extremes, Journal of Climate, Climate of the Past, Dendrochronologia, Hydrology and Earth System Sciences, 2019 – Committee Member of UMN Geography Space & Web Committee, 2025 – Student Representative for School of Geography, Development & Environment Director Search Committee, 2023 – 2024 Student Representative for the American Association of Geographers Paleoenvironmental Change Specialty Group, 2021–2022 Panel organizer for Women in Science and Engineering (WISE) STEM Panel Series, 2019–2021 Co-president of SAGA (Southern Arizona Geographer's Association), 2020–2021 Panel Moderator of the Imagine Your STEM Future session for the University of Arizona Launching Your Career Symposium, 2021 Co-organizer for the School of Earth and Environmental Sciences Earth Week, 2020 Committee Member of SAGA (Southern Arizona Geographer's Association), 2017–2019 Rapporteur for the Science, Health and Engineering Policy and Diplomacy Conference, Sustainable Development for the Americas, November 2019 Rapporteur for the Climate and Migration in Central America and Mexico: Drought, Vulnerability, Livelihoods and Attribution Workshop, September 2019 Student Representative for the Spanish & Portuguese Studies Committee, 2015–2016 Honors Ambassador/Admissions Ambassador for the University of Minnesota, 2013–2015 Children's Program Leader for CLUES (Comunidades Latinas Unidas En Servicio), 2014 |
| TRAINING | University of Minnesota Center for Educational Innovation Early Career Teaching & Learning Program, 2025– Compounding, cascading, and critical risks to U.S. infrastructure and security workshop, August 2025 Climate Migration Modeling Intercomparison Workshop, November 2024 Community Earth System Model (CESM) Tutorial at the National Center for Atmospheric Research, July 2023 Cyverse Foundational Open Science Skills Course, Fall 2022 Mitchell Hamline School of Law Effectively Communicating Science Expert Witness Training Academy, July 2022 STEPS Centre Summer School on Pathways to Sustainability, May 2021 Anti-racist Teaching Workshop, March 2021 |

Alan Alda Science Communication Workshop, January 2020
Workshop on Risk Analysis for Extremes in the Earth System, July 2019
Curso Programación Avanzada en R para Análisis Masivo de Imágenes Satelitales (Advanced Programming Course in R for Satellite Imagery), July 2018
10th World Dendrochronology Fieldweek, June 2018
Curso-Taller: Dendrocronología y sus aplicaciones hidroclimáticas y ecológicas (Course-Workshop: hydroclimate and ecological applications in dendrochronology), Fall 2016
Central American Dendroecological Fieldweek (CADEF), Spring 2015

PRESS/POPULAR SCIENCE

Guest wrote for science communication blog, ‘What’s going on with the rains?’, CLIMAS, October, 2023.
Research featured in ‘In a warming world, hunger stalks Guatemala’s Mayan highlands’, Reuters, October, 2023.
Research featured in ‘El Niño threatens an already struggling region’, La Presse, August 2023.
Research featured in ‘Researchers Discover Nuanced Connection Between Climate Change And Immigration’, KJZZ Public Radio, November 2019.
Research featured in ‘When Reporting Climate-Driven Human Migration, Place Matters’, UA News, November 2019.

LANGUAGES

English – first language
Spanish – professionally advanced