**TREVIS J. MATHEUS CURRICULUM VITAE** October 2020

California State University Fullerton Dept. of Geography & the environment | tmatheus@fullerton.edu | (657) 278-3685 | trevismatheus.wix.com/cal-dendro

EDUCATION

Indiana University Bloomington, Bloomington, IN

|  |  |
| --- | --- |
| **Ph.D. Geography**Atmospheric Science & Climatology | **2017** |
| Minor: Statistics |  |
| Advisor: Dr. Justin Maxwell |  |
| **M.S. Geography**Climate and Environmental Changes | **2014** |

Embry-Riddle Aeronautical University, Prescott, AZ

# B.S. Applied Meteorology 2011

Minor: Mathematics

RESEARCH INTERESTS

Climate extremes, with a focus on events surrounding the onset and ending of droughts, long term patterns in teleconnections, as well as general climate research, and dendrochronology.

PROFESSIONAL EXPERIENCE

|  |  |
| --- | --- |
| California State University Fullerton, Fullerton, CA |  |
| Department of Geography and the Environment | **2017 -** |
| Assistant Professor |  |
| Indiana University Bloomington, Bloomington, IN |  |
| Department of Geography | **2012 - 2017** |
| Associate Instructor |  |
| North American Monsoon Experiment (NAME) Student Researcher | **2009 - 2011** |

PEER-REVIEWED PUBLICATIONS

Maxwell J.T., Harley G.H., Matheus T.J., Strange B., Pendergrass K., Au T.F., Bregy J.C., 2020 Sampling density and date control spatial representation of tree ring reconstructions, *Climate of the Past,* **online preprint**.

Heeter K., Harley G.H, Maxwell J.T., McGee J., Matheus T.J., 2020: Late summer temperature variability for the Southern Rocky Mountains (USA) since 1735 CE: Applying blue light intensity to low-latitude Picea engelmannii Parry ex Engelm, *Climatic Change,* **online preprint.**

Matheus, T.J., Maxwell J.T., 2018: Placing modern droughts in historical context in the Ohio Valley using tree-rings, *Physical Geography,* 1-11.

Matheus T.J., Maxwell J.T., Harley G.H. 2017: A method for measuring sub- annual ring widths of *Pinus edulis* for seasonal climate reconstructions, *Tree-Ring Research*, **73.2**, 91-101.

Matheus T.J., Maxwell J.T., Oliver J., Thornton M., Hess M., Harley G.H. 2017: A dendrochronological evaluation of three historic cabins at Spring Mill Village, Indiana, *Dendrochronologia,* **43.2017**, 12-19.

Maxwell J.T., Harley G.H., Matheus T.J., 2015: Dendroclimatic reconstructions from multiple co-occurring species: a case study from and old- growth deciduous forest in Indiana, USA, *International Journal of Climatology*, **35.6**, 860-870.

*In Preparation*

Matheus T.J., Maxwell J.T., Harley G.H.: A millennial length reconstruction of the North American Monsoon in New Mexico from Tree-Rings, Target Journal is *Geophysical Research Letters* (to be submitted by Spring 2020).

CONFERENCE PRESENTATIONS

Pardo J.R., Cotton J.M., Matheus T.J., Schwartz J., December 2019: Secret nuclear meltdown? Measuring Cs-137 concentration from tree cores to determine radiation exposure from the Santa Susana Field Laboratory, Simi Valley, CA. *American Geophysical Union* Fall Meeting. (Poster)

Matheus T.J., April 2019: Adventures in Teaching Mountain Field Geography. *California Geographical Society*, Sacramento, Ca. (Paper)

Matheus T.J., Maxwell J.T., Harley G.H., April 2019: The potential for a millennial length spatially dense monsoon reconstruction from tree-rings in New Mexico, USA. *Annual Meeting of the Association of American Geographers*, Washington DC. (Paper)

Matheus T.J., April 2018: New Species and sub-annual perspectives in US Southwest Dendroclimatology. *California Geographical Society*, Sacramento, Ca. (Paper)

Matheus T.J., Maxwell J.T., April 2016: Methods for measuring latewood rings widths for climate signal in Pinyon Pine. *Annual Meeting of the Association of American Geographers*, San Francisco, Ca. (Paper)

Matheus T.J., Maxwell J.T., April 2015: A tree-ring reconstruction of droughts and inter- regional comparisons of teleconnections in the Midwest, USA. *Annual Meeting of the Association of American Geographers*, Chicago, Il. (Paper)

Maxwell J.T., Harley G.L., Pendergass K., Matheus T.J., December 2015: Dendroclimatic reconstruction from multiple co-occurring species from old-growth deciduous forests in Indiana, USA. *American Geophysical Union Annual Meeting*, San Francisco, Ca. (Poster)

Maxwell J.T., Harley G.L., and Matheus T.J., April 2014: Reconstructions from multiple co- occurring species: a case study from and old growth deciduous forest in Indiana, USA. *Annual Meeting of the Association of American Geographers*, Tampa, Fl. (Poster)

*Invited Talks*

“Cal-Dendro: Dendrochronological research frontiers”, CSUDH Earth Science and Geography colloquium, 2019.

“CSUF bridges, my teaching philosophy”, CSUF Geography and the Environment, 2019.

“Frontiers of Dendroclimatology in the western US”, CSUF Osher Life Long Learning, 2019.

“Sub-annual perspectives in western US Dendroclimatology”, Southern California Geological Society, 2018.

“New species and sub-annual perspectives in Dendroclimatology”, CSUF Department of Geological Sciences Seminar, 2018.

“A dendrochronological evaluation of three historic cabins at Spring Mill Village”, Indiana, CSUF All Points of the Compass, 2017.

“A 332 year reconstruction of Midwest droughts from tree-rings”, Indiana UniversityWeather Club, 2014.

TEACHING EXPERIENCE

|  |  |
| --- | --- |
| California State University Fullerton | Indiana University Bloomington |
| Geography 110: Introduction to the Natural Environment | G107: Introduction to Physical Geography  |
| Geography 311: Introduction to Weather and Climate | G109: Introduction Weather and climate |
| Geography 421: Meteorology  | G185: Environmental Change: The End of the World |
| Geography 422: Global Climate Change | G305: Paleoclimates |
| Geography 483: Mountain Field Geography |  |
| Geography 499/599: Independent Study (13 Students since 2017) |  |
| Geography 520: Graduate Physical Geography Seminar |  |

SERVICE

* + - CSUF Department of Geography Internship Coordinator, 2020 to present.
		- CSUF Humanities and Social Sciences Student Scholarships and Awards Committee, 2020 to Present.
		- CSUF Department of Geography Graduate Committee Chair, 2019 to present.
		- CSUF Geography and the Environment department Election Liaison, 2019.
		- CGS “Dendro” field trip co-organizer, 2019.
		- Principal Investigator of Cal-Dendro Tree-Ring Laboratory, 2017 to present.
		- CSUF Department of Geography Graduate Student Committee, 2017 to present.
		- Co-organizer and Chair of 4 Dendrochronology Sessions for the 2016 Annual Meeting of the Association of American Geographers.

MEDIA AND NEWS

 *2018:*

* + - “Tree rings tell CSUF students about droughts and fires in the sierra”, Fawthrop, W., Orange County Register, URL: <https://www.ocregister.com/2018/08/21/tree-rings-tell-csuf-students-about-droughts-and-fires-in-the-sierra/>, August 21, 2018.
		- “Students discover what tree rings can reveal about droughts, fires”, Penkingcarn, L., CSUF News Service, URL: <http://news.fullerton.edu/2018su/Tree-Ring-Researchers.aspx>, August 14, 2018.
		- “Climate Change With Dr. Trevis Matheus”, Whatever You Like Podcast, URL: <https://www.mixcloud.com/WhateverYouLike/climate-change-with-dr-trevis-matheus/>, April 24, 2018.

 *2017:*

* + - “The Way South”, Matheus, T.J., Lift Magazine, URL: <https://lift.erau.edu/the-way-south/>, Fall, 2017.
		- “An inside look at Cal State Fullerton’s intensive hiring process”, Marshel, D., Daily Titan, URL: <https://dailytitan.com/2017/09/cal-state-fullerton-professors-hiring-process/>, September 18, 2017.
		- “Geographer examines tree rings to understand climate change”, CSUF News Service, URL: <http://news.fullerton.edu/2017su/Trevis-Matheus.aspx>, August 28, 2017.

ADVISING

Olivia Hinton

|  |  |
| --- | --- |
| **M.A. Geography**“Climate Response of trees in the greater Yellowstone Ecoregion” | **2017-2020** |

Raymond Villalba

|  |  |
| --- | --- |
| **M.A. Geography**“Climate response of *Pinus sp.* in the High Sierra” | **2017-2020** |

*Committee Member:*

Justin Pardo

|  |  |
| --- | --- |
| **M.S. Geology (CSUN)**“Secret nuclear meltdown? Measuring C-137 from environmental | **2018-2020** |

 samples to determine radiation exposure from SSFL, Simi Valley, CA”

Guadalupe Maldonado

|  |  |
| --- | --- |
| **M.A. Geography**“The paradox of culturally useful invasive species: Tule | **2017-2019** |

 (*Typha Domingensis*) crafts of lake Patzcuaro, Mexico”

HONORS AND AWARDS

*Fellowships and Funding*

# 2015 Arnold Arboretum MICROmorph Woody Plant Anatomy Course

Funding awarded to attend plant anatomy course at the Arnold

|  |  |
| --- | --- |
| Arboretum of Harvard University | **2015** |
| **John Odland Research Fund**Funding award granted to conduct PhD dissertation work | **2015** |
| **John Odland Research Fund**Funding award granted to conduct M.S. thesis work | **2013** |
| *Awards* |  |
| **Stephen S. Visher Climate Paper Award**Award for paper titled: “A method for measuring sub-annual ring |  |
| widths of *Pinus edulis* for seasonal climate reconstructions” | **2017** |
| **Stephen S. Visher Indiana Paper Award**Award for paper titled: “A dendrochronological evaluation of three |  |
| historic cabins at Spring Mill Village, Indiana | **2017** |
| **William R. Black Leadership Award**Award for leadership in Indiana University’s Geography Department | **2016** |
| **Geography Alumni Associate Instructor Teaching Award**Awarded for courses taught between 2013-2014 | **2014** |
| **NSF STEM Scholar**National Science Foundation Science Technology Engineering and Math | **2011** |