

Diana A. Moanga, PhD

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Appointments

04/2023 – present Lecturer – **Stanford University**
01/2023 – present Manager of the Spatial Analysis Center – **Stanford University**
09/2022 – 01/2023 Postdoctoral Researcher – **Stanford University**
Department of Earth System Science, Doerr School of Sustainability
02/2021 – 08/2022 Postdoctoral Researcher – **Florida International University**
Department of Earth and Environment, Sea Level Solutions Center

Education

08/2015 – 12/2020 PhD – **University of California Berkeley**
Environmental Science Policy and Management
01/2014 – 08/2015 MS – **University of Miami**
Marine Affairs and Policy
08/2012 – 12/2013 BA – **University of Miami**
Marine Affairs, Ecosystem Science and Policy (Minor)
08/2008 – 04/2012 **Florida International University**
Hospitality and Tourism Management (transferred to University of Miami)

Publications

- 2022 Dillis, C., Butsic, V., **Moanga, D.**, Parker-Shames, P., Wartenberg, A., & Grantham, T. The threat of wildfire is unique to cannabis among agricultural sectors in California. *Ecosphere*.
<https://esajournals.onlinelibrary.wiley.com/doi/10.1002/ecs2.4205>.
- 2021 Troxler, T., Clement, A. C, Arditi-Rocha, Y., Beesing, G., Bhat, M., Bolson, J., Caban-Aleman. C., Castillo. K., Collins, O., Cruz, M., Dodd, A., Evans, S.D., Fleming, A.L., Sequera, C.G., Gilbert, J., Hernandez, A., Folder, C., Ilcheva, M., Kelly, E., Leon, A., Lombard, J., Mach, K., **Moanga, D.**, Murley, J.F., Knowles, A., Obeysekera, J., Parra, L., Posner, J., Sarwat, A., Silverstein, R., Stuart, J.A., Sukop, M, Wdowinski, S., & Wheaton, E. (2021). A System for Resilience Learning: Developing a community-driven, multi-sector research approach for greater preparedness and resilience to long-term climate stresses and extreme events in the Miami metropolitan region. *Journal of Extreme Events*.
<https://doi.org/10.1142/S2345737621500196>.
- Wartenberg C.A., **Moanga D.**, & Butsic V. (2021). Identifying drivers of change and predicting future land-use impacts in established farmlands. *Journal of Land Use Science*. <https://www.tandfonline.com/doi/full/10.1080/1747423X.2021.2018061>.
- Wartenberg, A., **Moanga, D.**, Potts, M.D., & Butsic V. (2021). Limited economic-ecological trade-offs in a shifting agricultural landscape: a case study from Kern County, California. *Frontiers in Sustainable Food Systems, section Agroecology and Ecosystem Services*, 5:650727, <https://doi.org/10.3389/fsufs.2021.650727>.
- 2020 **Moanga, D.**, Biging, G.S., Butsic, V., & Radke, J. (2020). The space time cube as an

- approach to quantifying future wildfires in California. *International Journal of Wildland Fire*, 30(2). <https://doi.org/10.1071/WF19062>.
- 2018 Laćan, I., **Moanga, D.**, Butsic, V., & McBride, J.R. (2020). Sealed in San José: paving of front yards and its effect diminishes on urban forest resource and benefits in low- density residential neighborhoods. *Journal of Urban Forestry & Urban Greening* 54. <https://doi.org/10.1016/j.ufug.2020.126755>.
- 2018 **Moanga, D.**, Schroeter, I., Ackerly, D., & Butsic, V. (2018). Avoided land use conversions and carbon loss from conservation purchases in California. *Journal of Land Use Science* 13(4): 391-413. <https://doi.org/10.1080/1747423X.2018.1533043>
- 2017 Butsic, V., Shapero, M., **Moanga, D.**, & Larson S. (2017). Using InVEST to assess ecosystem services on conserved properties in Sonoma County, CA. *California Agriculture* 71(2):81-89. <https://doi.org/10.3733/ca.2017a0008>.
- Glynn, P.W., Alvarado, J.J., Banks, S., Cortés, J., Feingold, J.S., Jiménez, C., Maragos, J.E., Martínez, P., Maté, J.L., **Moanga, D.A.**, Navarrete, S. Reyes-Bonilla, H., Riegl, B., Rivera, F., Vargas-Angel, R., Wieters, E.A., & Zapata, F.A. (2017). Eastern Pacific coral reef provinces, coral community structure and composition: an overview. In *Coral Reefs of the Eastern Tropical Pacific* (pp. 107-176). Springer, Dordrecht. https://link.springer.com/chapter/10.1007/978-94-017-7499-4_5.
- 2015 **Moanga, D.** (2015). *Karenia brevis* hot spots in the west Florida shelf and their associated socio-economic implications. University of Miami Scholarly Repository.
- In Prep* John D., Clare, J., de Valpine, P., B, **Moanga, D.**, & Beissinger, S.R. A cloudy forecast for predicting long-term species distribution shifts: California birds after a century of climate and land-use change. *Global Change Biology*.
- Myers-Pigg, A.N., Bailey, V., Bond-Lamberty, B., Holmquist, J., Kirwan, M., Magonigal, P., **Moanga, D.**, Ward, N.D., & White Jr. E., A network-of-networks framework for leveraging coordinated, distributed research efforts to understand coastal disturbance impacts.
- Moanga, D.**, T. Troxler, K. Ishtiaq, S. Jacobson, M. Cruz, A. Clement, A. Hernandez, & Z. Adefris. Understanding Miami's urban heat with the help of citizen science. *Journal of Urban Climate*.
- Hemond, O., Butsic V., **Moanga, D.**, & Wartenberg, A. Linking agricultural consolidation and turnover dynamics to changing crop diversity and agricultural resource use. *Agricultural Systems*.
- Clare, J., **Moanga, D.**, Butsic, V., DeValpine, P., Tingley, M., Epanchin, P., Iknayan, K., MacLean, S., & Beissinger. S. Some rise, some fall, and some contort: growth, collapse, and turnover in bird communities across California in response to a century of climate and land use change. In preparation for the *Proceedings of the National Academy of Sciences*.
- Clement. A., Troxler, T., Keefe, O., Arcodia, M., Cruz, M., Hernandez. A., **Moanga, D.**, Adefris. Z. & Jacobson, S. Hyperlocal Observations Reveal Persistent Extreme Urban Heat in Southeast Florida. *Journal of Applied Meteorology and Climatology*.

Technical reports

- 2022 Ghebremichael, K., Troxler, T., Hernandez, A., Fourqurean, R., Jerome, L., Carroll, K., **Moanga, D.**, Lazzaroni, H., Roy, S., Jenkins, J., McFarlane-Weinstein, J., Kaur, A., Knowles, H., Alvarez, S., Sukop, & M., Obeysekera, J. (2022). Laying the groundwork for 'Getting to Neutral' in the State of Florida. Technical Report. Florida Climate Institute. <https://floridaclimateinstitute.org/2012-03-02-19-57-58/getting-to-neutral-report>.
- 2018 Ackerly, D., Battles, J., Butsic, V., Gonzalez, P., Kelly, M., Silver, W., Saah, D., Di Tommaso, S., Mayer, A., **Moanga, D.**, Schroeter, I., & Riordan, B. (2018). Land Acquisition and Ecosystem Carbon in Coastal California. California's Fourth Climate Change Assessment. Publication number: CCCA4-EXT-2018-003.
- Radke, J.D., Biging, G.S., Rovers, K., Schmidt-Poolman, M., Foster, H., Roe, E., Ju, Y., Lindbergh, S., Beach, T., Maier, L., He, Y., Ashenfarb, M., Norton, P. Wray, M., Alruheil, A., Yi, S., Rau, R. Collins, J., Radke, D., Coufal, M., Marx, S., **Moanga, D.**, Ulyashin, V., & Dalal, A. (2018). Assessing Extreme Weather-Related Vulnerability and Identifying Resilience Options for California's Interdependent Transportation Fuel Sector. California's Fourth Climate Change Assessment, California Energy Commission. Publication Number: CCCA4-CEC-2018-012.

Teaching Experience

Stanford University (Co-Instructor)	Spring 2023	Remote Sensing of Land (Undergraduate - Ug & /Graduate - G)
Stanford University (teaching assistant -TA)	Winter 2023	From Freshwater to Oceans to Land Systems: An Earth System Perspective to Global Challenges (G)
UC Berkeley (TA)	Fall 2018, 2020 Spring 2016	International Politics (Ug) Environmental Issues (Ug)
University of Miami (TA)	Fall 2013, 2014; Spring 2015 Spring 2015	Spatial Applications in Marine Science (Ug) Spatial Analysis: Intermediate Course in Marine GIS (G)
	Spring, Fall 2014	Introduction to Marine GIS Laboratory (Ug)

Service and professional development

- Peer Reviewer for: AGU Advances; MDPI Remote Sensing; MDPI Land; MDPI Sustainability; MDPI Agriculture; MDPI Fire; International Journal of Wildland Fire; Journal of Land Use Science; *PLOS Sustainability and Transformation*; Journal of Environmental Planning and Management; Landscape and Urban Planning; International Journal of Environmental Research and Public Health; International Journal of Disaster Risk Reduction.
- 2021 Collaborative Online International Learning (COIL) Program:
Design for Adaptability: Coastal Design Explorations for Changing Climatic Conditions and Social/Cultural Environments.

Academic Presentations

- 2022 *Mapping and Monitoring Extreme Heat and King Tide Flooding in North Miami Beach with the Help of Citizen Scientists*. ESRI User Conference. San Diego, CA. (Poster presentation).
- 2021 *Understanding Miami's urban heat with the help of citizen science*. International Congress of Biometeorology (ICB).
Understanding the different dimensions of Coastal Resilience Seminar in Marine Science at the University of Miami.
- 2020 *Modelling land use and land cover changes for conservation*. Sustainable Seminars The Associated Students of the University of California.
- 2019 *Introduction to GIS and remote sensing: potential applications*. Forest Management Seminar at UC Berkeley.
Map design: creating effective visualizations. Introduction to GIS at UC Berkeley.
The space time cube as an approach to quantifying future wildfires in California (2000-2100). ESRI User Conference. San Diego, CA. (Poster presentation).

Media mentions

- 2022 *California Wildfires Threaten Nearly All of State's Cannabis Crops*. Newsweek.
<https://www.newsweek.com/california-wildfires-threaten-nearly-all-states-cannabis-crops-1742111>

Technical Skills, Languages and Certificates

Software: ArcPro, R, STATA, C++, Python, arcPy, Google Earth Engine, eCognition, InVEST, ENVI, Tableau.

Languages: Romania (native), English (proficient), Spanish (conversational), French (conversational).

ESRI Cartography Certificate (June 2020).

Collaborative Institutional Training Initiative (CITI) Program, Social/Behavioral Human Research Course (August 2021).

Outreach and Community Service

- 2022 Represented the FIU Sea Level Solutions Center at Natural Disaster Expo
 Organized and lead workshops for the Resilient305 Collaborative
 Represented FIU at the Phillip and Patricia Frost Museum of Science for Earth Day Celebration
 Helped lead "Science for Kids" event during Earth Week at the museum
- 2021 Organized citizen science events and community engagement opportunities at FIU Sea Level Solution Center
- 2018 Organized and lead the Mature & Historic Tree Stands Management Symposium
- 2014 Volunteer at the Coral Reef Futures Lab at University of Miami
- 2013 Member of the University of Miami Propeller Club

Awards and Accomplishments

Florida International University Postdoctoral Scholar Travel Award (2022)

Part of the Southeast Florida Regional Citizen Science Climate Action Network – Awarded second place in the Climate Challenge Cup at the UN Climate Change Convention - COP 26 (2021)

Florida International University Postdoctoral Scholar Research Recognition Award (2021)

UC Berkeley Travel Grant Summer (2019)
UC Berkeley Travel Grant Spring (2019)
Outstanding Graduate Student Instructor (GSI) Award (Spring 2019)
UC Berkeley Starter Grant Award (2015)
RSMAS Graduate Career Development Fund (2014)
Master of Professional Science (MPS) Partial Tuition Scholarship (2014)
Graduated Summa Cum Laude (4.0 GPA), top 1% of graduating class of University of Miami (2013)
University of Miami Honor: President's & Provost's Honor Rolls & Dean's List (2012-2013)
University of Miami Dean's Scholarship (2012)
Florida International University Student Government Association Recognition award (2011-2012)
FIU SAGE Scholarship (2011)
Sally Goldman Scholarship (2011)
Philip and Euline Honors College Scholarship (2010)
Florida International University Dean's List (every academic semester between 2008 and 2012)
Florida International University Presidential Scholarship (2008)