



Diana Moanga

Lecturer

Earth System Science

 Curriculum Vitae available Online

Bio

BIO

Diana Moanga is a Lecturer and the Manager of the Spatial Analysis Center in the Stanford Doerr School of Sustainability. She teaches the Remote Sensing of Land class and the Fundamentals of Geographic Information Science class. Her research includes studying land use land cover change processes using remote sensing and spatial analysis, focusing on the effects of environmental and anthropogenic stressors on coastal socio-environmental systems. She is particularly passionate about furthering our understanding of climate equity for coastal communities and mapping coastal hazards at various scales. She has a Ph.D. in Environmental Science Policy and Management from UC Berkeley in 2020. Her dissertation research used geospatial techniques to study land use and land cover changes across California. Specifically, her research explored management impacts on California's coastal lands, agricultural transitions in the Central Valley, and wildfire activity under future climate regimes. Diana also earned a Master's in Science in Marine Affairs and Policy from the University of Miami in 2015. For her master's research she examined the spatial and temporal characteristics of harmful algal blooms and studied coastal zone management and coral conservation.

ACADEMIC APPOINTMENTS

- Lecturer, Earth System Science

PROFESSIONAL EDUCATION

- BA, University of Miami , Marine Affairs (2013)
- MS, University of Miami , Marine Affairs and Policy (2015)
- PhD, University of California Berkeley , Environmental Science Policy and Management (2020)

Teaching

COURSES

2023-24

- Fundamentals of Geographic Information Science (GIS): EARTHSYS 144, ESS 164 (Aut)
- Remote Sensing of Land: EARTHSYS 142, EARTHSYS 242, ESS 162, ESS 262 (Spr)

2022-23

- Remote Sensing of Land: EARTHSYS 142, EARTHSYS 242, ESS 162, ESS 262 (Spr)

Publications

PUBLICATIONS

- **A cloudy forecast for species distribution models: Predictive uncertainties abound for California birds after a century of climate and land-use change.** *Global change biology*

- Clare, J. D., de Valpine, P., Moanga, D. A., Tingley, M. W., Beissinger, S. R.
2023: e17019
- **Hyperlocal Observations Reveal Persistent Extreme Urban Heat in Southeast Florida** *Journal of Applied Meteorology and Climatology*
Clement, A., Troxler, T., Keefe, O., Arcordia, M., Cruz, M., Moanga, D., Hernandez, A., Adefris, Z., Jacobson, S.
2023
 - **Farm consolidation and turnover dynamics linked to increased crop diversity and higher agricultural input use.** *Agricultural Systems*
Olivia, H., Butsic, V., Moanga, D., Wartenberg, A.
2023
 - **The threat of wildfire is unique to cannabis among agricultural sectors in California** *ECOSPHERE*
Dillis, C., Van Butsic, Moanga, D., Parker-Shames, P., Wartenberg, A., Grantham, T. E.
2022; 13 (9)
 - **Identifying drivers of change and predicting future land-use impacts in established farmlands** *JOURNAL OF LAND USE SCIENCE*
Wartenberg, A. C., Moanga, D., Butsic, V.
2022; 17 (1): 161-180
 - **Limited Economic-Ecological Trade-Offs in a Shifting Agricultural Landscape: A Case Study From Kern County, California** *FRONTIERS IN SUSTAINABLE FOOD SYSTEMS*
Wartenberg, A. C., Moanga, D., Potts, M. D., Butsic, V.
2021; 5
 - **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*.
Troxler, T., et al
2021
 - **The space-time cube as an approach to quantifying future wildfires in California** *INTERNATIONAL JOURNAL OF WILDLAND FIRE*
Moanga, D., Biging, G., Radke, J., Butsic, V.
2021; 30 (2): 139-153
 - **"Sealed in San Jose:" Paving of front yards diminishes urban forest resource and benefits in low-density residential neighborhoods** *URBAN FORESTRY & URBAN GREENING*
Lacan, I., Moanga, D., McBride, J. R., Butsic, V.
2020; 54
 - **Avoided land use conversions and carbon loss from conservation purchases in California** *JOURNAL OF LAND USE SCIENCE*
Moanga, D., Schroeter, I., Ackerly, D., Butsic, V.
2018; 13 (4): 391-413
 - **Using InVEST to assess ecosystem services on conserved properties in Sonoma County, CAYY** *CALIFORNIA AGRICULTURE*
Butsic, V., Shapero, M., Moanga, D., Larson, S.
2017; 71 (2): 81-89
 - **Eastern Pacific Coral Reef Provinces, Coral Community Structure and Composition: An Overview** *CORAL REEFS OF THE EASTERN TROPICAL PACIFIC: PERSISTENCE AND LOSS IN A DYNAMIC ENVIRONMENT*
Glynn, P. W., Alvarado, J. J., Banks, S., Cortes, J., Feingold, J. S., Jimenez, C., Maragos, J. E., Martinez, P., Mate, J. L., Moanga, D. A., Navarrete, S., Reyes-Bonilla, H., Riegl, et al
2017; 8: 107-176