Stanford



Caroline Alexa Famiglietti

Ph.D. Student in Earth System Science

Bio

BIO

Caroline Famiglietti is a PhD candidate working with Prof. Alexandra Konings. She studies the terrestrial carbon cycle, focusing on understanding and reducing uncertainties in model projections of its behavior. In 2017, Caroline graduated summa cum laude from UCLA with a B.S. in Applied Mathematics and a minor in Geography/Environmental Studies. Her prior research experience includes work in the Carbon Cycle & Ecosystems group at NASA JPL from 2017-2018 and in the UC Berkeley Department of Civil & Environmental Engineering in 2016.

HONORS AND AWARDS

- FINESST Award, NASA (2021-2024)
- ARCS Fellowship, ARCS Foundation, Stanford University (2021-2022)
- Stanford Graduate Fellowship, Stanford University (2018-2021)

EDUCATION AND CERTIFICATIONS

• B.S., UCLA, Applied Mathematics (2017)

LINKS

• LinkedIn: https://www.linkedin.com/in/carolinefamiglietti/

Professional

WORK EXPERIENCE

- Research Intern (Carbon Cycle & Ecosystems Group) NASA Jet Propulsion Laboratory, California Institute of Technology (2017 2018)
- Project Lead, Sustainable L.A. Grand Challenges Program UCLA (2016 2017)
- Undergraduate Research Assistant Department of Civil & Environmental Engineering, UC Berkeley (2016)
- Environmental Education Network Intern TreePeople (2014)

Publications

PUBLICATIONS

 Extreme wet events as important as extreme dry events in controlling spatial patterns of vegetation greenness anomalies ENVIRONMENTAL RESEARCH LETTERS

Famiglietti, C. A., Michalak, A. M., Konings, A. G. 2021; 16 (7)

Optimal model complexity for terrestrial carbon cycle prediction BIOGEOSCIENCES

Famiglietti, C. A., Smallman, T., Levine, P. A., Flack-Prain, S., Quetin, G. R., Meyer, V., Parazoo, N. C., Stettz, S. G., Yang, Y., Bonal, D., Bloom, A., Williams, M., Konings, et al

2021; 18 (8): 2727-2754

• Plant responses to volcanically elevated CO2 in two Costa Rican forests BIOGEOSCIENCES

Bogue, R. R., Schwandner, F. M., Fisher, J. B., Pavlick, R., Magney, T. S., Famiglietti, C. A., Cawse-Nicholson, K., Yadav, V., Linick, J. P., North, G. B., Duarte, F.

2019; 16 (6): 1343-60

• Global Validation of MODIS Near-Surface Air and Dew Point Temperatures Geophysical Research Letters

Famiglietti, C. A., Fisher, J. B., Halverson, G., Borbas, E. E. 2018

• Ecosystem Responses to Elevated CO2 Using Airborne Remote Sensing at Mammoth Mountain, California Biogeosciences

Cawse-Nicholson, K., Fisher, J. B., Famiglietti, C. A., et al 2018