

# Stanford

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## Eric Mayer

Postdoctoral Scholar, Earth System Science

### Bio

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#### BIO

Ending catastrophic wildfires by making biochar.

Eric Mayer earned a PhD in Environmental Engineering from Stanford University (2020), where he studied fluid mechanics and published research parameterizing lee-wave drag for ocean circulation models, tangentially improving global climate simulations.

Graduating in the early months of the pandemic and eager to act on the implications of his research, Eric went looking for a more immediate way to effect the climate crisis. Upon learning of biochar's potential for rapidly-scalable carbon sequestration and the simple technologies already developed for on-site biochar production, Eric founded the biochar-as-a-service company Napachar. Today, you can find Napachar in the vineyards and forests of Napa and Sonoma, California, diverting pulled vines and forestry slash from burn piles to bake in flame-cap biochar kilns, returning "waste" carbon to the soil.

Beginning in the spring of 2026, Eric returned to Stanford in a postdoctoral position with the Woods Institute for the Environment and the Doerr School of Sustainability Accelerator, with the mission of ending catastrophic wildfire in fire-adapted forests by making biochar.

#### STANFORD ADVISORS

- Chris Field, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **On Internal Tides Driving Residual Currents and Upwelling on an Island** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*  
Rogers, J. S., Mayer, F. T., Davis, K. A., Fringer, O. B.  
2022; 127 (7)
- **Resolving nonhydrostatic effects in oceanic lee waves** *OCEAN MODELLING*  
Mayer, F. T., Fringer, O. B.  
2021; 159
- **Improving Nonlinear and Nonhydrostatic Ocean Lee Wave Drag Parameterizations** *JOURNAL OF PHYSICAL OCEANOGRAPHY*  
Mayer, F. T., Fringer, O. B.  
2020; 50 (9): 2417–35
- **CONNECTING PROCESS MODELS OF TOPOGRAPHIC WAVE DRAG TO GLOBAL EDDYING GENERAL CIRCULATION MODELS** *OCEANOGRAPHY*

Arbic, B. K., Fringer, O. B., Klymak, J. M., Mayer, F. T., Trossman, D. S., Zhu, P.  
2019; 32 (4): 146–55

- **An unambiguous definition of the Froude number for lee waves in the deep ocean** *JOURNAL OF FLUID MECHANICS*  
Mayer, F. T., Fringer, O. B.  
2017; 831