Stanford

Zachary Kaufman

Casual - Other Teaching Staff

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Curriculum Vitae available Online

Bio

BIO

I am broadly interested in how Earth's atmosphere, ocean, and cryosphere interact to shape the spatial pattern of climate change. I primarily develop data-driven, statistical approaches to diagnose climate change mechanisms in state-of-the-art earth system models. At Stanford, I use these tools to evaluate the Southern Ocean's complex relationship with Antarctic ice-sheet mass balance. This work addresses key sources of uncertainty in current climate change projections, supporting improved climate impact assessments and a better-informed societal response to future changes. I recently completed my PhD in the Feldl Lab at University of California, Santa Cruz, where I used a causal inference approach to investigate the role of sea ice in polar climate change. Outside the lab, I enjoy mountain biking, skiing, cooking, and live music.

ACADEMIC APPOINTMENTS

- Casual - Other Teaching Staff, Continuing Studies and Summer Session

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of California Santa Cruz (2022)
- Bachelor of Arts, Wesleyan University , Earth & Environmental Science (2016)
- PhD, University of California, Santa Cruz , Climate Dynamics (2022)

STANFORD ADVISORS

- Earle Wilson, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Causes of the Arctic's Lower-Tropospheric Warming Structure** *JOURNAL OF CLIMATE*
  Kaufman, Z. S., Feldl, N.
  2022; 35 (6): 1983-2002
- **Causal Interactions between Southern Ocean Polynyas and High-Latitude Atmosphere-Ocean Variability** *JOURNAL OF CLIMATE*
  Kaufman, Z. S., Feldl, N., Weijer, W., Veneziani, M.
  2020; 33 (11): 4891-4905