

# Ryan A. Green

PHD CANDIDATE · BIOGEOCHEMICAL MODELING · MARINE CARBON DIOXIDE REMOVAL

UC Santa Cruz, 1156 High Street, Santa Cruz, CA 95064

✉ rygreen@ucsc.edu | 🏠 <https://ryanagreen.github.io/> | 📄 <https://github.com/RyanAGreen>

## Education

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### University of California, Santa Cruz

Santa Cruz, CA

PHD EARTH SCIENCE

2019 - present

- Advisor: Dr. Mathis Hain

### University of California, Davis

Davis, CA

BS ENVIRONMENTAL POLICY

2013 - 2018

- Minor in Oceanography
- Graduated with honors & departmental citation

## Research Experience

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- 2019-present **Graduate Student Researcher**, Hain lab, University of California, Santa Cruz
- 2018-2019 **Research Assistant**, Climate Change Research Centre, University of New South Wales
- 2018 **Undergraduate Research Assistant**, Stachowicz Lab, University of California, Davis
- 2017 **Undergraduate Research Assistant**, Baskett Lab, University of California, Davis

## Publications

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### PUBLISHED

**Green, R.A.**, Menviel, L., Meissner, K.J., Crosta, X., Chandan, D., Lohmann, G., Peltier, W. R., Shi, X., and Zhu, J. 2022. Evaluating seasonal sea-ice cover over the Southern Ocean at the Last Glacial Maximum. *Climate of the Past*, 2(1): 1000-1100.

### IN REVIEW

**Green, R.A.**, Hain, M.H., and Rafter, P.A. 2023. Deglacial Pulse of Neutralized Carbon from the Pacific Seafloor: Constraints from the Radiocarbon Budget. *Geophysical Research Letters*.

### IN PREP

**Green, R.A.**, Hain, M.H., Rafter, P.A., and Sun, C.  $\Delta^{14}\text{C}$  Anomalies Explained? Constraints on Neutralized Carbon Release into the Eastern Tropical North Pacific. *Paleoceanography and Paleoclimatology*.

**Green, R.A.**, Rafter, P.A., and Hain, M.H. Evaluating  $\delta^{13}\text{C}$  as a Tool to Verify Additionality After mCDR.

## Awards, Fellowships, & Grants

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- 2022 **Teaching Assistant of the Year**, UCSC Earth and Planetary Science Department  
**Graduate Dean's Research Travel Grant**, UCSC Graduate Division
- 2021 **Teaching Assistant of the Year-Honorable Mention**, UCSC Earth and Planetary Science Department
- 2020 **Teaching Assistant of the Year-Honorable Mention**, UCSC Earth and Planetary Science Department
- 2019 **Regents Fellowship**, UCSC Earth and Planetary Science Department  
**UNSW Summer Vacation Scholarship**, UNSW Climate Change Research Centre

2018 **University Honors**, UC Davis

**Departmental Citation**, UC Davis Environmental Science and Policy Department

2014-2017 **Deans List**, UC Davis

## Presentations

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### CONTRIBUTED PRESENTATIONS

**Green, R.A.**, Hain, M.H., Rafter, P.A., Gray, W.R., Rae, J.W.B., and \*Sun, C., 2023. Characterizing Geologic Carbon Release as an Explanation for Deglacial  $\Delta^{14}\text{C}$  Anomalies within the Eastern Tropical North Pacific. Oral presentation: AGU, Chicago, Illinois.

**Green, R.A.** 2022. Introduction to Paleoclimatology. Oral presentation: No Jargon Talks, Santa Cruz, California.

**Green, R.A.**, Hain, M.H., and Rafter, P.A. 2021. Constraints on Geologic Carbon Release at the End of the Last Ice Age from the Planetary Radiocarbon Budget. Oral presentation: AGU, New Orleans, Louisiana.

**Green, R.A.**, Hain, M.H., and Rafter, P.A. 2021. Constraining Earth's Geologic Influence on the Global Carbon Cycle During the Last Ice Age from the Planetary Radiocarbon Budget. Poster presentation: Goldschmidt, Virtual.

**Green, R.A.**, Hain, M.H., and Rafter, P.A. 2020.  $^{14}\text{C}$ -Constraints on the Deglacial Release of Geologic Carbon Using Atmospheric Records. Poster presentation: AGU, Virtual.

**Green, R.A.**, Menviel, L., Meissner, K.J. 2019. Evaluating seasonal sea-ice cover over the Southern Ocean at the Last Glacial Maximum. Oral presentation: PAGES C-SIDE workshop at ICP13, Sydney, Australia.

## Teaching Experience

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Winter 2023	<b>Intro to Environmental Sciences</b> , Teaching Assistant	UCSC
Winter 2022	<b>Intro to Environmental Sciences</b> , Teaching Assistant	UCSC
Winter 2021	<b>Intro to Environmental Sciences</b> , Teaching Assistant	UCSC
Fall 2020	<b>Intro to Computer Programming for Geoscientists</b> , Teaching Assistant	UCSC
Winter 2019	<b>Intro to Environmental Sciences</b> , Teaching Assistant	UCSC

## Mentoring

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2022-present	<b>David McCurdy</b> , Research Mentee	UCSC
2021-present	<b>Christopher Sun</b> , Research Mentee	UCSC
2021	<b>Beatrice O'Brien</b> , Research Mentee	UCSC
2021	<b>Caden Kang</b> , Research Mentee	UCSC
2021	<b>Jack Chang</b> , Research Mentee	UCSC

## Outreach & Professional Development

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### SERVICE AND OUTREACH

2014-2017	<b>UC Davis Football Special Olympics</b> , Volunteer	Davis, CA
2014-2017	<b>Shriners Children's Hospital</b> , Volunteer	Davis, CA
2016	<b>Evening of Dreams Special Needs Prom</b> , Volunteer	Davis, CA

### LEADERSHIP

2022-present	<b>International Carbon Ocean Network for Early Career Scientists</b> , Founding Member	Santa Cruz, CA
2018-2019	<b>University of New South Wales</b> , Assistant Football Coach	Sydney, AUS
2013-2017	<b>UC Davis Football</b> , Division-1 Student Athlete	Davis, CA

## PROFESSIONAL MEMBERSHIPS

American Geophysical Union  
Geochemical Society