

Daniela Faggiani Dias – Curriculum Vitae

EDUCATION

2020	Ph.D. Climate Sciences, Scripps Institution of Oceanography, University of California San Diego, San Diego, CA, USA
2013	M.S. Remote Sensing, National Institute for Space Research, Sao Jose dos Campos, Brazil
2010	B.S. Oceanography, Monte Serrat University, Santos, Brazil

PROFESSIONAL AND RESEARCH EXPERIENCE

2025 – Present	Scientist , Euro-Mediterranean Centre on Climate Change (CMCC), Milan, Italy
2022 – 2025	Operations Lead , Carbon Removal Initiative at Scripps Institution of Oceanography, San Diego, CA, USA
2022 – 2025	Project Scientist , University of California San Diego, Scripps Institution of Oceanography, San Diego, CA, USA
2020 – 2022	Research Scientist , Colorado State University, Department of Atmospheric Sciences, Fort Collins, CO, USA
2015 – 2020	Graduate Student Researcher (Ph.D.) , Scripps Institution of Oceanography, University of California San Diego, San Diego, CA, USA
2014	Technical Consultant , United Nations Convention Panel for Climate Change, Brasilia, Brazil
2011 – 2015	Research Assistant , National Institute for Space Research, Sao Jose dos Campos, Brazil

GRANTS AND FELLOWSHIPS

2019	National Center for Atmospheric Research, Advanced Student Program (NCAR-ASP), graduate visitor fellowship	\$ 7,000
2015	LASPAU-Harvard Graduate Fellowship	\$200,000

PUBLICATIONS ([Google scholar profile](#))

1. **Daniela Faggiani Dias**, Ryan Hanna, Yangyang Xu, Jeffrey Sachnik, Jack Gilbert, Wolfgang Busch, David G. Victor (2025). "Removing atmospheric CO2 through mass scaleup of crops with enhanced root systems". In: Environmental Research Letters **20**, 054004. doi: 10.1088/1748-9326/adc31b
2. Christina Frieder et al (2025). "Scoping the Development of a Comprehensive mCDR Assessment Framework for California Coastal Waters". Southern California Coastal Water Research Project. (January 2025)
3. Julia Blocher et al (2022). "Moving from Reaction to Action-Anticipating Vulnerability Hotspots in the Sahel: A synthesis report from the Sahel Predictive Analytics project in support of the United Nations Integrated Strategy for the Sahel (UNISS)."

4. Erica M Ferrer, Leticia M Cavole, Simona Clausnitzer, **Daniela Faggiani Dias**, Tashiana C Osborne, Rishi Sugla, and Emma Harrison (2021). “Entering Negotiations: Early-Career Perspectives on the UN Conference of Parties and the Unfolding Climate Crisis”. In: *Frontiers in Marine Science* 8, p. 474.
5. Leticia Maria Cavole, Solange Andrade-Vera, Jose R Marin Jarrin, **Daniela Faggiani Dias**, Octavio Aburto-Oropeza, and Maria Jose Barrágan-Paladines (2020). “Using local ecological knowledge of Fishers to infer the impact of climate variability in Galápagos’ small-scale fisheries”. In: *Marine Policy* 121, p. 104195.
6. Antonietta Capotondi et al (2019). “Observational Needs Supporting Marine Ecosystems Modeling and Forecasting”. In: *Frontiers in Marine Science* 6, p. 623.
7. **Daniela Faggiani Dias**, Daniel R. Cayan, and Alexander Gershunov (2018). “Statistical Prediction of Minimum and Maximum Air Temperature in California and Western North America”. In: *California’s Fourth Climate Change Assessment*, California Energy Commission. doi: CCCA4-CEC-2018-011.
8. **Daniela Faggiani Dias**, Aneesh Subramanian, Laure Zanna, and Arthur J. Miller (2018). “Remote and local influences in forecasting Pacific SST: a linear inverse model and a multimodel ensemble study”. In: *Climate Dynamics*. doi: 10.1007/s00382-018-4323-z.
9. Mainara B. Gouveia, Douglas F.M. Gherardi, Carlos A.D. Lentini, **Daniela Faggiani Dias**, and Paula C. Campos (2017). “Do the Brazilian sardine commercial landings respond to local ocean circulation?”. In: *PLoS ONE* 12.5, pp. 1–19. doi: 10.1371/journal.pone.0176808.
10. **Daniela Faggiani Dias**, Luciano P. Pezzi, Douglas F. M. Gherardi, and Ricardo Camargo (2014). “Modeling the spawning strategies and larval survival of the Brazilian sardine (*Sardinella brasiliensis*)”. In: *Progress in Oceanography* 123, pp. 38–53. doi: 10.1016/j.pocean.2014.03.009.

Work in Progress

1. Connor Mack, **Daniela Faggiani Dias**, Ryan Hanna, Jeffrey Meyers and David G. Victor. “The Scalability of Ocean Alkalinity Enhancement”. *Under review, Nature Communications*
2. **Daniela Faggiani Dias**, Ryan Hanna, Connor Mack and David G. Victor (*In Preparation*). “Pathways for global deployment of sustainable biochar”.
3. Anthony Wilson, Nicholas Lutsko, **Daniela Faggiani Dias**, Arthur J. Miller (*In Preparation*). “Projections of Earth’s Hottest Surface Temperature in CMIP6”.

PROFESSIONAL MEETINGS AND INVITED TALKS

2025	<p>“<i>UPTAKE project overview: Bridging current knowledge gaps to enable the UPTAKE of carbon dioxide removal methods</i>”, C-Sink workshop, Brussels, Belgium (Talk, Invited)</p> <p>“<i>Scaling Potentials of Carbon Removal Technologies</i>”, Energy Seminar Series, UCSD, La Jolla, CA, USA (Talk, Invited)</p>
2024	<p>Workshop “<i>Scoping the Development of a Comprehensive mCDR Assessment Framework for California Coastal Waters</i>”, Southern California Coastal Water Research Project, Costa Mesa, CA, USA (Invited)</p> <p>Workshop “<i>Carbon Dioxide Removal Strategies – Scaling in a Systems Resource Context</i>”, Caltech, Pasadena, CA, USA (Invited)</p> <p>“<i>Removing atmospheric CO2 through mass scaleup of crops with enhanced root systems</i>”, Suberin Club Seminar Series, Salk Institute for Biological Studies, La Jolla, CA, USA (Talk,</p>

Invited)

- “Assessing the Scaling Potential of Carbon Removal Technologies”, UCSD D2I Seminar, La Jolla, CA, USA (Talk, **Invited**)
- “What is the Scaling Potential of Marine Carbon Removal”, AGU Fall Meeting, Washington, DC, USA (Talk)
- “Removing atmospheric CO₂ through mass scaleup of crops with enhanced root systems”, AGU Fall Meeting, Washington, DC, USA (Poster)
- 2023 “Diffusion of Carbon-Enhanced Plants: Implications for the Rate and Volume of Atmospheric Carbon Dioxide Removal”, AGU Fall Meeting, San Francisco, CA, USA (Poster)
- “Diffusion of Carbon-Enhanced Plants: Implications for the Rate and Volume of Atmospheric Carbon Dioxide Removal”, CCS Workshop, Stanford, CA, USA (Poster, **Invited**)
- 2021 “Empirical approaches for near-term climate predictions”, seminar at Rio de Janeiro Federal University, online (Talk, **Invited**)
- 2020 “Improvement in predictive skill across timescales: Justification for a seamless approach”, AGU Fall Meeting, online event. (Poster)
- “Exploring sources of errors in surface and subsurface Pacific decadal predictions”, Ocean Sciences Meeting, San Diego, CA, USA (Poster)
- 2019 “Local, Traditional and Indigenous Knowledge and Climate change in Latin America”, 25th United Nations Conference of Parties (COP 25), Madrid, Spain (Talk)
- 2018 “Statistical prediction of minimum and maximum air temperature in the Western North America”, International Conferences on Subseasonal to Decadal Prediction, Boulder, CO, USA (Poster)
- “Seasonal to Decadal Predictions of Northeastern Pacific Sea Surface Temperatures”, Eastern Pacific Ocean Conference, Mount Hood, OR, USA (Poster)
- 2017 “Remote and Local Influences in Forecasting Pacific SST: A Linear Inverse Model and a Multimodel Ensemble Study”, AGU Fall Meeting, New Orleans, LA, USA (Talk)
- “What drives precipitation changes throughout the globe?”, 23rd United Nations Conference of Parties (COP 23), Bonn, Germany (Talk)

PROFESSIONAL AND COMMUNITY SERVICE

Professional Committees

- 2024 – Present Member, *Committee on Climate Variability and Change of the American Meteorological Society*
- 2021 – 2022 Staff representative, *CSU Diversity, Equity, and Inclusion Committee*
- 2020 – 2021 North American Representative, *Young Earth System Scientists*

Conferences and Workshops Organization

- 2026 Scientific Steering Committee and Organizing Committee for the “4th International Conference on Carbon Dioxide Removal”, Politecnico di Milano, Milan, Italy
- 2024 Chair and Co-Convener of Scientific Session “Scaling Potentials of Carbon Dioxide Removal

Technologies: Approaches, Constraints and Challenges", AGU Fall Meeting, Washington DC, USA

- 2024 Co-organizer of Workshop "*Achieving Academic Collaboration on Carbon Removal Research: Vision and Strategy*", Scripps Institution of Oceanography, San Diego, CA, USA
- 2021 Organizing committee for the "*World Climate Research Program Workshop on attribution of multi-annual to decadal changes in the climate system*", Online event
- 2020 Organizing committee of the Innovative Session "*Moving Beyond the Standard: A Transdisciplinary Virtual Event for Early-Career Scientists*", panel "*Creating and Sustaining Just, Equitable, Diverse, and Inclusive Spaces as an Early Career Researcher*", AGU Fall Meeting, Online Event
- 2019 Co-Chair of the 65th *Eastern Pacific Ocean Conference (EPOC)*, Fallen Leaf Lake, Lake Tahoe, CA, USA

Peer-review

Journals Climate Dynamics, Journal of Climate, Geophysical Research Letters, Journal of Physical Oceanography

Community Service and Outreach

- 2023 – Present Unit Chair, *UCSD Academic Union (UAW 4811)*
- 2022 Mentor, *Geolatinas Mentoring Program*
- 2018 – 2020 Volunteer, *Stay Cool: protect our grandkids from global warming*
- 2017 – 2020 Volunteer, *Citizen's Climate Lobby, San Diego Chapter*
- 2017 – 2020 Mentor, *Rosa Parks Tutoring Program*
- 2017 – 2018 Department representative, *UCSD Graduate Student Association*

ADVISING AND MENTORING EXPERIENCE

- 2023 – present Research Advisor for PhD student Connor Mack, UCSD-SIO
- 2023 – present Mentor and Research Advisor for PhD student Anthony Wilson, UCSD-SIO

RESEARCH AND FIELD EXPEDITIONS

- 2019 Global Ocean Ship-Based Hydrographic Investigations Program (GO-SHIP), Cape Town (South Africa) – Antarctica
- 2016 Flow Encountering Abrupt Topography (FLEAT), Palau
- 2013 & 2014 32nd and 33rd Brazilian Antarctic Operation (OPERANTAR), Rio De Janeiro (Brazil) – Ushuaia (Argentina) – Antarctica