ALESSIO ROVERE

Ph.D. in Marine Environmental Sciences.
Full Professor in physical geography and geomorphology.
Access my full CV here
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ABOUT ME

I am a geoscientist specializing in the evolution of coastal areas. In particular I study coastal dynamics and sea-level changes at various timescales, from millions of years to decades. I am a passionate surfer, wing foiler and scuba diver.

CONTACT

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SOCIAL

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Alessio Rovere

HONORARY POSITIONS

- **Since 2024** Honorary Professor, University of Bremen
- **Since 2022** External member, MARUM, University of Bremen
- **04/2014 - 08/2021** Adjunct Associate Research Scientist, LDEO, Columbia University

VISITING PERIODS

- **2010.** University of Western Australia
- **2010.** Brunel University, UK
- **2009-2010.** University of the Aegean, GR
- **2004.** Universidad de Las Palmas de Gran Canaria (ERASMUS), ES

WORK HISTORY

Since 1/2024 Universitá Ca' Foscari - Venezia (IT)	Full Professor
11/2021 - 11/2024 Universitá Ca' Foscari - Venezia (IT)	Associate Professor
03/2019 - 10/2021 MARUM and University of Bremen - Bremen (DE)	Independent research scientist
03/2014 - 02/2019 MARUM, University of Bremen and Leibniz ZMT - Bremen (DE)	Young Investigator Group Leader
02/2012 - 02/2014 Lamont Doherty Earth Observatory, Columbia University - New York (USA)	Postdoctoral research scientist
10/2010 - 12/2016 SEAMap SRL, a Spin-off company of the University of Genoa (IT)	Director (Amministratore Unico)

EDUCATION

01/2008 - 12/2010 University of Genoa (IT) European Ph.D. Label	Ph.D. in Marine Sciences
01/2008 - 12/2010 University of Genoa (IT) Marine Environmental Sciences	Master of science
01/2008 - 12/2010 University of Genoa (IT) Environmental Sciences	Bachelor of science

TEACHING

I have been teaching several courses at the University of Bremen and Ca' Foscari University of Venice. I currently teach the courses **"Coastal hazards (MSc)"** and **"Physical geography and geomorphology (BSc)"** at Ca' Foscari and the course **"Sea Level Changes (MSc)"** at the University of Bremen.

MENTORING AND SUPERVISION

I have mentored **nine postdoctoral researchers**. Upon leaving my team, several researchers have successfully transitioned to other academic positions or into industry roles. I supervised **four doctoral students** until the completion of their thesis. I supervised as main or co-supervisor **twenty one BSc or MSc students** from different European Universities.

€ FUNDING

Research projects - As **Principal Investigator**, I have successfully led several research projects, securing a total of **4.2 million €** in funding. In particular, I hold a Starting Grant from the European Research Council (ending in 2025), and I started my own research group at the University of Bremen and at the Leibniz Center for Tropical Marine Research thanks to funding of the German Science Foundation. I have participated in several research projects as **Co-Principal Investigator**, for a total amount of **960 thousand €**.

Conferences and workshops - I have played a significant role in organizing conferences and workshops, directly managing funds provided by various associations and institutions to cover expenses and support the participation of **young scientists and scientists from low-income or developing countries**. I have contributed to grant writing and the management of funds. Overall, since 2012 I secured **~55 thousand €** from scientific associations such as PAGES, INQUA and the EGU.

ACADEMIC SERVICE

Academic service

- **Since 2024.** Coordinator of the degree course (MSc and BSc) in Environmental Sciences at Ca' Foscari University of Venice
- **Since 2023.** President of the "Coastal and Marine Processes" commission of the International Union for Quaternary Sciences
- **Since 2023.** Ph.D. Program Board (Collegio di dottorato) for the "Doctoral of National Interest in Polar Sciences" at Ca' Foscari University of Venice
- **Since 2022.** Member of the Steering Committee of the "Instabilities and Thresholds in Antarctica (INSTANT) of SCAR
- **Since 2022.** Member of the "Ca' Foscari ERC Board"
- **Since 2022.** Member of the "ESAlab" Scientific Committee (Ca' Foscari and European Space Agency)
- **Since 2022.** Member of the "Technical and Scientific Commitee" of the Cinque Terre Marine Protected Area (IT)
- **2020.** Contributing author for the 6th Assessment Report of the Intergovernmental Panel on Climate Change
- **2018-2023.** Co-leader of the International working group 'PALSEA' PALeo constraints on SEA level rise, funded by PAGES and INQUA
- **2012-2016.** Co-leader of the International working group 'MEDFLOOD', sponsored by INQUA

Editor / reviewer roles

- **Since 2022.** Journal editor - Earth System Science Data, Copernicus (EGU, Since 2022) and Climate of the Past, Copernicus (EGU, Since 2018)
- **2019-2022.** Book editor - Book: UAVs in Environmental Sciences
- **2019-2022.** Special Issue Editor - Earth System Science Data and Quaternary Science Reviews
- **Since 2012.** Reviewer for more than 50 manuscripts and for research proposals to several international foundations

Conferences, workshops and convened sessions

- **2023.** Convener and session chair at several conferences (INQUA Rome - 2023, PAGES OSM - 2022, GeoBremen - 2017, AGU - 2015
- **2017 to 2022.** Co-organizer of the annual PALSEA workshop (2017, Galloway, NJ, USA - 2019, Dublin, IE - 2020, Online - 2022, Singapore)
- **2021-2022.** Co-organizer of a webinar series on paleo sea level organised jointly by PALSEA, WCRP (sea level), IAG, and SERCE
- **2019.** Co-organizer of the CoChE Summer school. Coastal Changes and Evolution. Oristano, IT
- **2012 to 2016.** Co-organizer of the annual MEDFLOOD workshop (2012, Rome, IT - 2014, Haifa, IL - 2016, Bremen, DE)

RESEARCH

My research spans a broad range of geographical areas, focusing on coastal and sea-level changes. I investigate **modern coastal transformations** in Germany and Ghana. In tropical areas like Moorea, Tahiti, and Fiji, my studies explore the **interactions between modern coastal processes and coral reef ecological dynamics**. Additionally, I examine **paleo sea-level variations (from the Holocene to the Pliocene)** in diverse locations such as the Mediterranean, USA, Cape Verde, the Bahamas, Aruba, Curaçao, Bonaire, Madagascar, Bermuda, Argentina, Brazil, Seychelles, South Africa, and Indonesia. My work also entails studying the **underwater topography of coral reefs** in the Maldives. I employ a variety of methodologies to tackle the complexities of marine and coastal geomorphology at these globally distributed sites. I have led research expeditions to all the aforementioned locations, overseeing logistics, securing research permits, and orchestrating the scientific organization of the fieldwork on multiple occasions.

PUBLICATIONS

I published **98 articles** in international scientific journals, **11 on other peer-reviewed media** and **6 book chapters and books**.

OPEN DATA

I share open-access datasets and presentations on the following platforms:

- Zenodo
- PANGAEA
- Figshare

SELECTED PUBLICATIONS

The names of postdocs, Ph.D. or master students authored while under my mentoring or supervision are underlined. A full publication list is available here

Rovere, A., Ryan, D. D., Vacchi, M., Dutton, A., Simms, A. R., & Murray-Wallace, C. V. (2023). The world atlas of last interglacial shorelines (version 1.0). *Earth System Science Data*, *15*(1), 1–23. https://doi.org/10.5194/essd-15-1-2023

Rovere, A., Pico, T., Richards, F., O'Leary, M. J., Mitrovica, J. X., Goodwin, I. D., Austermann, J., & Latychev, K. (2023). Influence of reef isostasy, dynamic topography, and glacial isostatic adjustment on sea-level records in Northeastern Australia. *Communications Earth & Environment*, *4*(1), 328. https://doi.org/10.1038/s43247-023-00967-3

Dyer, B., Austermann, J., D'Andrea, W. J., Creel, R. C., Sandstrom, M. R., Cashman, M., **Rovere**, A., & Raymo, M. E. (2021). Sea-level trends across the Bahamas constrain peak last interglacial ice melt. *Proceedings of the National Academy of Sciences of the United States of America*, *118*(33), 1–11. https://doi.org/10.1073/pnas.2026839118

Gowan, E. J., Zhang, X., Khosravi, S., **Rovere**, A., Stocchi, P., Hughes, A. L. C., Gyllencreutz, R., Mangerud, J., Svendsen, J. I., & Lohmann, G. (2021). A new global ice sheet reconstruction for the past 80 000 years. *Nature Communications*, *12*(1), 1–9. https://doi.org/10.1038/s41467-021-21469-w

Vacchi, M., Joyse, K. M., Kopp, R. E., Marriner, N., Kaniewski, D., & **Rovere**, A. (2021). Climate pacing of millennial sea-level change variability in the central and western Mediterranean. *Nature Communications*, *12*(1), 1–9. https://doi.org/10.1038/s41467-021-24250-1

Rovere, A., Pappalardo, M., Richiano, S., Aguirre, M. L., Sandstrom, M. R., Hearty, P. J., Austermann, J., Castellanos, I., & Raymo, M. E. (2020). Higher than present global mean sea level recorded by an Early Pliocene intertidal unit in Patagonia (Argentina). *Communications Earth & Environment*, *1*(1), 1–10. https://doi.org/10.1038/s43247-020-00067-6

Harris, D. L., **Rovere**, A., Casella, E., Power, H., Canavesio, R., Collin, A., Pomeroy, A., Webster, J. M., & Parravicini, V. (2018). Coral reef structural complexity provides important coastal protection from waves under rising sea levels. *Science Advances*, *4*(2), eaao4350. https://doi.org/10.1126/sciadv.aao4350

Rovere, A., Casella, E., Harris, D. L., Lorscheid, T., Nandasena, N. A. K., Dyer, B., Sandstrom, M. R., Stocchi, P., D'Andrea, W. J., & Raymo, M. E. (2017). Giant boulders and Last Interglacial storm intensity in the North Atlantic. *Proceedings of the National Academy of Sciences*, *114*(46), 201712433. https://doi.org/10.1073/pnas.1712433114

Rovere, A., Raymo, M. E., Vacchi, M., Lorscheid, T., Stocchi, P., Gómez-Pujol, L., Harris, D., Casella, E., O'Leary, M. J., & Hearty, P. J. (2016). The analysis of Last Interglacial (MIS 5e) relative sea-level indicators: Reconstructing sea-level in a warmer world. *Earth-Science Reviews*, *159*, 404–427. https://doi.org/10.1016/j.earscirev.2016.06.006

Rovere, A., Raymo, M. E., Mitrovica, J. X., Hearty, P. J., O'Leary, M. J., & Inglis, J. D. (2014). The Mid-Pliocene sea-level conundrum: Glacial isostasy, eustasy and dynamic topography. *Earth and Planetary Science Letters*, *387*, 27–33. https://doi.org/10.1016/j.epsl.2013.10.030