

VASCO MANTAS

RESEARCH SCIENTIST

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📍 Earth Sciences Department

Instituto Dom Luiz

University of Coimbra, Portugal

Climate and Spatial Intelligence Platform, Director



Key facts

- Biologist (University of Coimbra, 2006) holding a PhD in geology (University of Coimbra, 2017).
- University of Coimbra, Portugal
Assistant Researcher (Investigador Auxiliar)
2025 - present
- University of Coimbra, Portugal
Research Scientist
2021 - 2025
- University of Coimbra, Portugal
Research scientist /Principal Investigator (FOCUS)
2018-2025
- 1624 citations, and over 8 million euros in funding. 1 satellite in construction.
- International member of NASA's Precipitation Measurement Mission Science Team.
- Former director of the Earth Observation Laboratory (eoLab) and current director of the Climate and Spatial Intelligence Platform (CSIp).
- Winner of the Copernicus Masters award 2022 (Overall winner and Frontier Tech winner).



Research interest

Vasco Mantas is an Assistant Researcher at the University of Coimbra, Director of the Climate and Spatial Intelligence Platform (CSIP), and currently serves as Secretary of the AGU Informatics Section. His research sits at the intersection of Earth observation, environmental informatics, and surface-atmosphere interactions, with a particular interest in precipitation, land-surface processes, environmental change, and the ways increasingly complex Earth data can be transformed into useful knowledge. His work has developed through collaborative projects including GRADIENTES, FOCUS, and THEOSCOPE, as well as international activities connecting environmental observations, data science, and applications (e.g. co-leading the NASA GPM Mentorship Program).

A central part of Vasco's work is building communities around science. He sees informatics not simply as a set of technologies, but as a means of enabling people to ask better questions, work across disciplines and borders, and contribute to a better environment. He is particularly committed to cloud literacy and cloud-based Earth science applications, capacity building, mentorship, and collaborative research that broadens participation in both science and technology. Through AGU Informatics, he wants to help create a community where researchers at different career stages and from different parts of the world can share expertise, develop practical skills, form meaningful collaborations, and ensure that advances in data and computing translate into stronger science (and healthier workplaces) and greater societal and environmental impact.

Selected publications

- Mantas, V. & Portier, A., (foreword by George Huffman) (2026) "GPM Mentorship Program. Connecting Precipitation Data to Society." NASA GPM, 150 p., ISBN: 979-8-218-92990-9. DOI: <https://doi.org/10.5281/zenodo.20387851>.
- Mantas, V., Portier, A., Huffman, G. (2026) Lowering Barriers to the Adoption and Mainstreaming of Earth Observation Data: The Global Precipitation Measurement Mission (GPM) Mentorship Program. BAMS (Bulletin of the American Meteorological Society), E1402–E1409, <https://doi.org/10.1175/BAMS-D-25-0050.1>.
- Hirose, M., Shige, S., Kubota, T., Seto, S., Mantas, V., Fujinami, H., Furuzawa, F., Minda, H., Masunaga, H. (2026) Filling observational gaps in spaceborne precipitation radars. J. Meteorol. Soc. Jpn. 104, 24. <https://doi.org/10.1007/s44394-026-00025-4>
- Ermida, S.F., Soares, P., Mantas, V., Göttsche, F.M, Trigo, I.F., 2020. Google Earth Engine open-source code for Land Surface Temperature estimation from the Landsat series. Remote Sensing, 12(9), 1471. <https://doi.org/10.3390/rs12091471>