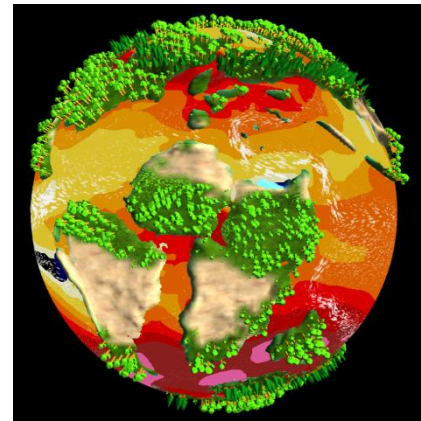


Improving future climate prediction through modelling and data of Earth's past

Lead Institution/Department: University of Bristol, School of Geographical Sciences

Primary Supervisor: Dan Lunt

Co-supervisors: Fanny Monteiro, Carrie Lear (Cardiff University)



Scholarship: The Bristol Postgraduate Research Scholarship covers full fees, a stipend at UKRI (UK Research and Innovation) rates (£20,780 for 25/26) for living expenses, and up to £2,100 per year for research expenses, for a registration period of 4 years. Study will begin in September 2026.

The deadline for applications is 19th January 2026.

<https://www.bristol.ac.uk/science-engineering/postgraduate-research/pgr-scholarships/>

Project aims and methods

There is great potential for climate model evaluation and development to utilise data associated with past climate states. The underlying philosophy is that we would expect to have more confidence in future predictions from a model which has successfully simulated both past and modern climate states. In this project we will improve future climate predictions by tuning a climate model to better simulate key periods from Earth's past history. Focus will be on past time periods identified as being informative in the latest IPCC report – the Last Glacial Maximum (21,000 years ago), the mid-Pliocene (3 million years ago), and the early Eocene (50 million years ago). The project will have links to the European-wide “Past2Future” project, and there will be opportunities to attend overseas project meetings.

Candidate Requirements

Applicants will ideally have some background in quantitative science, e.g. physics, maths, chemistry, geophysics, meteorology, earth sciences, or physical geography. They will also have an interest in climate science.

Further Information

Please contact Dan Lunt (d.j.lunt@bristol.ac.uk) for informal enquiries.

- <https://www.bristol.ac.uk/geography/courses/postgraduate>
- <https://www.bristol.ac.uk/geography/courses/postgraduate/physphd.html>
- <https://www.nature.com/articles/s41561-024-01604-0>

How to Apply: Please apply to the “Geography (PhD)” programme at <https://www.bristol.ac.uk/study/postgraduate/apply/>