

PhD Project Opportunity:

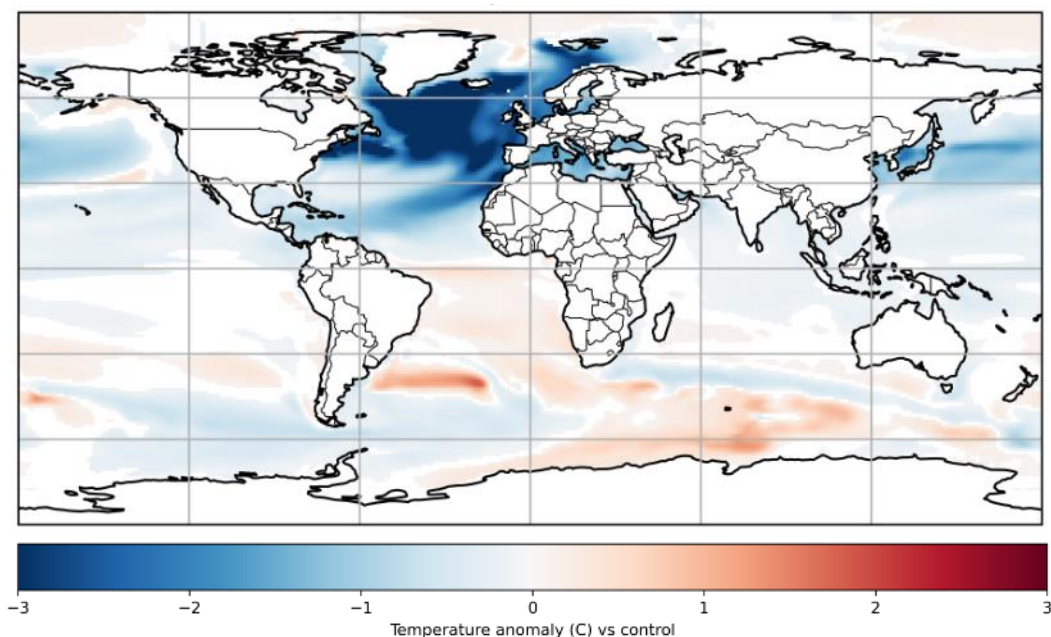
Southern Hemisphere climate and cryosphere impacts from a tipping point in global ocean circulation

Project Overview

The Atlantic Meridional Overturning Circulation (AMOC) is a critical component of global ocean circulation responsible for redistributing heat between the hemispheres. The AMOC is driven by density gradients in the North Atlantic and is projected to weaken under climate change. Several lines of evidence suggest the AMOC is capable of non-linear behaviour, transitioning abruptly from strong to weak modes with ramifications for global climate.

This project seeks to constrain the signal-transfer mechanisms and climatic impacts in the Southern Hemisphere of future weakening of the AMOC using climate and ice sheet models. This 3-year project is supported by the Marsden Fund and involves collaboration between climate scientists across New Zealand, Australia, the USA, the Netherlands, and Germany.

We have **1 full PhD scholarship available**, providing tuition fees and a stipend for 3 years.



Ideal Candidate

Successful candidates will have completed **Master's-level study** in one or more of the following: *climate physics, earth system science, glaciology, meteorology, oceanography, physical geography (or other closely related fields)*. Experience with quantitative research methods and computer programming is advantageous.

Supervisory Team

- **Primary contact:** Shaun Eaves (shaun.eaves@vuw.ac.nz)