

Science at Monash University

Inspiring the next generation of STEM Leaders,
Changemakers & Innovators

About Monash Uni (School of Earth, Atmosphere and Environment)

Earth Science is a branch of the physical sciences that focuses on the Earth and our Solar System, and includes studies on the Earth's atmosphere, rocky composition, environments, oceans, climate and our planetary neighbours.

Some of humanity's greatest challenges such as climate change, pandemics, natural hazards, bushfires, drought, mass extinctions and resource scarcity are rooted in the Earth Sciences. We provide scientific understanding of our planet and critical thinking skills to enable us to better advocate for change, to create solutions, and to make the world a better place to live.

There is a wide range of well-paid career opportunities for Earth Science graduates including environmental consultancy, weather forecasting, resource mining, risk analysis, natural hazard management, scientific research and public policy.

STEM is integral to Monash University's School of Earth, Atmosphere and Environment. Our first-year cohort undertake a number of science-focused global issues studies including

- How the Earth has evolved over 4.5 billion years
- Food and water security
- The science of climate change
- How and why weather extremes, bushfires and other natural hazards occur
- Expanding your knowledge of Australia's environments, oceans, geology and climate

About Dr. James Driscoll

My name is James and I am an Assistant Lecturer at Monash University. My research is focused on how river systems developed and changed deep in the geological past before land vegetation evolved. I undertake fieldwork using drone technology in a number of countries including Hawaii, Iceland, New Zealand and the United Arab Emirates. I'm passionate about science (in fact, you might even call me a science geek!) and I regularly work with high school students to cultivate curiosity and spark an interest in science.



Videos

In this climate change workshop, students will be introduced to the scientific evidence for climate change and will MythBust several common misconceptions.

<https://youtu.be/WUO2OBYjax8>

In this Train the Trainer session Dr. James Driscoll will discuss the differences between weather and climate, thus dispelling one of the most common myths regarding Anthropogenic Climate Change (including some infamous Trump Tweets). James will also demonstrate how real-world data in the Australian context can be used as part of a student activity.

<https://youtu.be/3sZzsGfZd7c>

Understanding ice sheet dynamics is a fascinating and multidisciplinary endeavour, requiring the skills of geophysicists, oceanographers, climate modellers and geographers.

<https://youtu.be/ITxDTXBH130>

<https://www.monash.edu/science/schools/earth-atmosphere-environment>