

July 2023

MSc and PhD research projects available at UFS Geography (Bloemfontein)

Theme: Quaternary climate change, landscape evolution (mapping & modelling), geochronology (cosmogenic ³⁶Cl and/or ¹³⁷Cs), geoconservation and education (through immersive technologies like virtual reality, 360 film and photography) at sub-Antarctic islands.

- Project 1: Constraining the volcanological and geomorphological development of Gough Island,
 South Atlantic Ocean, will be through geochronological dating and mapping.
- Project 2: Understanding the role of local topography in Marion Island's deglaciation using palaeo-climate based modelling.
- Project 3: Calibrating Southern Hemisphere ³⁶Cl production rates with data form Gough and Marion islands.
- Project 4: Establishing a ¹³⁷Cs reference inventory on Marion and Gough islands.
- Project 5: Utilising immersive technologies (virtual reality, 360 film and photography) to create virtual field trips for the sub-Antarctic islands.

Ideal skills/interests:

- Background in either Physical Geography / Geomorphology / Soil Science / Climatology / Geospatial Statistics / Modelling / Geography Education.
- Interested in learning new skills and can work independently.
- Field or laboratory experience is an advantage but not a requirement.

You will be working in collaboration with national and/or international institutions.

Research costs (field or lab) are covered; opportunities for tuition and subsistence funding are available.

If you are interested, contact RudolphEM@ufs.ac.za. Please add your CV and attach your latest research output (proposal, thesis, paper).



