

Antarctic Science International Bursary Ltd,

I'd like to extend a big thank you for funding the opportunity to complete a research visit to Durham University in which I worked with Dr Stewart Jamieson on development of a glacier-model for the David Glacier.

The aim of my project is to reconstruct the geologically-recent history of David Glacier, a large outlet glacier of the East Antarctic Ice Sheet. I plan to use geological evidence, to be collected in the upcoming 2017/2018 Antarctic field season, to inform numerical simulations of this glacier which aims to identify it's sensitivity to past environmental change. This work is timely as the increasing realisation that glacier catchments of East Antarctica may be more responsive to climate and ocean forcing than previously thought.

Stewart Jamieson at Durham University, in collaboration with Faezeh Nick (UNIS) and Andreas Vieli (U. Zurich), have developed an outlet glacier model that includes some of the key processes which drive the retreat of polar marine terminating glaciers. By working directly with Stewart, I was able to adapt this model to the David Glacier and begin simulations. Our key objective for this research visit, to develop a working knowledge in the application of this model, was achieved and I am currently working independently back in New Zealand. This work will continue to evolve through close communication between Durham and Wellington and we look forward to sharing our results in meetings and publications.

Thanks again for your support!

-Jamey Stutz
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