

Postgraduate Conference Support: American Geophysical Union Fall Meeting, San Francisco, 14th – 18th Dec 2015

Alistair Everett

Glaciology Group, College of Science, Swansea University, UK

Email: A.Everett.743498@swansea.ac.uk

Summary

I was very grateful to receive a grant of £1000 from the British Society of Geomorphology in order to cover my attendance at the AGU Fall Meeting 2015 and the Greenland Ice Ocean Observing System workshop on the 12th and 13th December. This was the first time I had attended the AGU Fall Meeting, which is the largest international meeting of geoscientists annually. The conference and workshop gave me an excellent opportunity to meet other scientists, get feedback on my research and see the latest international research presented at the conference.

Presentations

I gave an oral presentation entitled 'Water Levels in Crevasses Reveal Subglacial Water Pressure Variations at Helheim Glacier, South East Greenland' in session 'C43E: Hydrology of Glaciers, Ice Caps, and Ice Sheets in Past, Present, and Future Climates III'. The presentation covered some of the research I have carried out as part of my PhD. The research focusses on the growth and drainage of lakes on the surface of Helheim Glacier, East Greenland. Using satellite imagery it is possible to monitor their growth and drainage throughout the year. These observations were compared to modelling of lake drainages based upon theories which have been used elsewhere on the ice sheet. However, it was found that this theory could not explain the observations at Helheim. I therefore

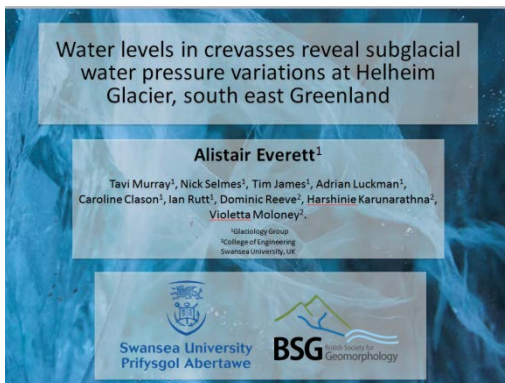


Figure 1: Opening slide of my AGU Fall Meeting presentation.

presented a new theory in order to explain the observed behaviour, which was supported by an analysis of the subglacial hydrological system at Helheim Glacier. The presentation was included in a session which was recorded, and the presentation can be accessed via [AGU On-Demand](#) (requires log in). A paper on this work is now in revision for publication in the Journal of Geophysical Research: Earth Surface.

I was also invited to attend a workshop prior to the AGU Fall Meeting, which focussed on discussing the implementation of a Greenland Ice Ocean Observing System. During the meeting I gave a brief presentation on another technique, which I have been working on during my PhD to improve estimates of the volume of water released from ocean-terminating glaciers around the coastline of Greenland. I also participated in discussions on how a Greenland wide observing system could be implemented and the techniques and methods which would be feasible for a long-term observing system. The workshop was a great opportunity to meet other scientists and be involved in the planning of future research in Greenland.

Additional Outcomes

Throughout the AGU Fall Meeting and GrIOOS workshop I had numerous interesting and useful conversations with other researchers on future areas of study. These have laid the foundations for future collaborations and research and have already led to a number of skype discussions with researchers internationally, which would not have been possible without the help of the BSG.

Use of BSG Funds

Funding from the BSG covered travel to San Francisco (flights: £390, airport parking: £40), accommodation (£480), with the remainder contributing to food and subsistence during the conference. Without the assistance of the BSG I would have struggled to meet these costs, so I am very grateful for their support.