

# AGU Celebrate 100 Grant Project Support Report

## “Walk the Talk” Field Conference and Community Consultation

*Turning Knowledge into Developmental Action in the Mt. Everest (Khumbu) Region of Nepal (9<sup>th</sup>-21<sup>st</sup> December 2018). Report by C. Scott Watson (RockyGlaciers.co.uk)*

The 12 day “Walk the Talk” trek through Sagarmatha National Park was designed to discuss the results of a diverse range of research in the region with local communities and officials. Topics covered glaciers, mountains, environmental and landscape change, Sherpa livelihoods, tourism, and natural hazards, and were presented by a team of international and Nepali scientists. The conference was the first of its kind, and was designed to receive community input into research topics and pursue applied benefits. Presentations were given in six villages along the Everest Base Camp trekking trail, although our final destination was the nearby Imja Glacial Lake. A Final presentation was given at the Department of Tourism in Kathmandu, from which several officials joined us on the trek.

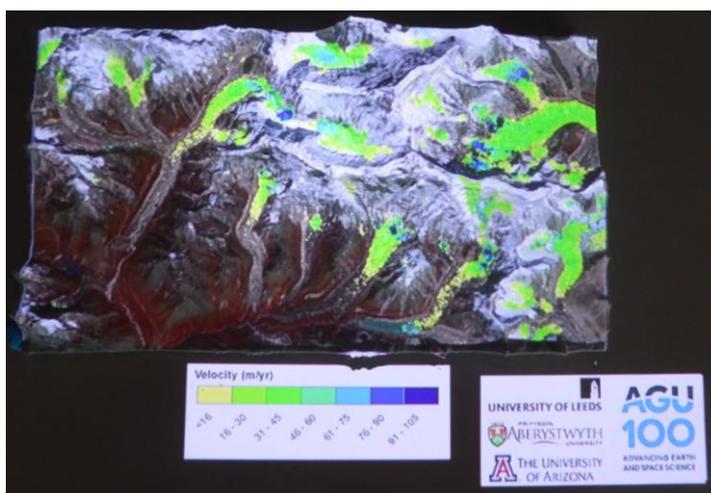


Group photo with Mount Everest backdrop following presentations at the Sagarmatha National Park (SNP) office in Namche (3500 m a.s.l) to approximately 60 participants (wrapped up against the cold temperatures).

An outreach grant awarded by AGU Celebrate 100 was used to enhance the PowerPoint presentations given at each village by providing interactive demonstrations of key research concepts and results using projection augmented relief models (PARM), a thermal camera, and outreach leaflets. The PARM system was designed using 3D printed models, a small tripod-mounted projector, and research results including glacier velocity, mass loss, ice thickness, temperature, and animations of glacier flow. The data were projected onto the 3D model, which provided easy visualisation and stimulation of discussion. The system was designed to be highly portable for the trek, which covered thousands of metres of ascent to the final destination at >5000 m a.s.l; however, it is scalable for use with larger models. Thermal imagery and copies of outreach leaflets will be uploaded to [RockyGlaciers.co.uk](http://RockyGlaciers.co.uk) and all the resources will be developed further for future outreach events. Funding will be sought to provide a larger PARM system and resources for display in the Sagarmatha National Park Museum. PhD student Katie Miles also designed an outreach model of Khumbu Glacier, which provided an interactive demonstration of dye tracing to show the surface and subsurface glacier hydrology. All outreach activities received great interest and positive feedback. We will use community feedback to ensure our research outputs are always accessible by those affected by environmental change.



(Left) Participants discussing the PARM model. (Below) an example of glacier velocity data projected onto the 3D model of the Everest region.



### Further details

A blog of the trek is available at <https://walk-talk.com/blog/>

Additional details and photos will appear on [www.RockyGlaciers.co.uk](http://www.RockyGlaciers.co.uk)