

Scope

The application of seismic techniques to the study of Earth surface processes is a rapidly growing field. However, the field is relatively new and inherently multidisciplinary. As a consequence, no platform currently exists for the exchange of ideas amongst the growing number of seismologists, geomorphologists, glaciologists, hydrologists, volcanologists, geotechnical engineers, and other Earth surface scientists who are using or want to use seismic techniques.

This conference aims to change that by starting to build a community around environmental seismology. We plan to survey the state of the art, share new analysis techniques, discuss specific scientific needs, and identify opportunities for obtaining benchmark data where both seismological and traditional geomorphic observations can be or have been obtained with high data quality.

We invite all scientists who use seismic techniques to study geomorphological processes, the cryosphere, the weather, the shallow subsurface, and other phenomena at or near the Earth's surface. We also decisively invite all those who have realised the potential of seismic techniques and are interested in linking with the pioneering community or who wish to use seismic approaches in the future.

Seismic methods have distinct advantages over and complement traditional methods for the study of Earth surface dynamics. For example, they allow for the observation of a multitude of processes acting on the Earth's surface and their interactions throughout the entire landscape, and we can gather near-complete catalogues of events and record their distribution in time and space. This allows us to study the interaction of process groups, cause and response within temporal sequences, and lead and lag times with unprecedented detail and applications that were not possible previously.

Though relatively new, seismological techniques in Earth surface research have now passed the proof-of-concept stage and several ground-breaking scientific results have been published, there is still much progress to be made. We anticipate that by facilitating the formation of a community of scientists using or interested in using these techniques through this workshop, scientific progress will be expedited, will improve communication between scientists from disparate fields, and environmental seismology will find even broader application.

Thank you

We thank the EGU, NSF and our corporate sponsors Omnirecs, Nanometrics, Lennartz electronics GmbH and DiGos for supporting the conference and especially the attendance of early career researchers. Katja Gänger from Copernicus made the handling of the registration and the finance a piece of cake and also kept the website up to date. The staff at the Hotel Alpenblick looked after our well-being, and even so we all put on a couple of kilos of weight, we are very grateful for the fantastic food. Special thanks to Antonia and Michaela handling the small and big requests in the conference centre. Our keynote speakers James Kirchner, Victor Tsai, Eric Larose, Tim Bartholomäus, and Anne Mangeney did a great job educating us about various aspects of Earth surface processes and environmental seismology. Jens is eternally grateful to Anne and Michael for their help on the organisation committee, as well as to the science committee for putting everything together and for dealing with random assignments in the run-up to and during the event. We thank the Reintalangerhütte for hosting the field trip and Michael Krautblatter for his detailed explanations. Finally, we thank all the participants for making the long journey to attend, for engaging with the follies of the committee and for keeping up the great atmosphere. Hope to see you all at the next meeting!

Photo gallery
