



The Australian Seismometers in Schools Network: promoting geoscience to high school students through real-time earthquake data recording

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The Australian Seismometers in Schools program (AuSIS) has just completed year one of its initial four-year program. The year has been filled with excitement as we completed installing pilot instruments in schools, launched the program nationally and received over 110 “Expressions of Interest” from schools around Australia. The data quality has exceeded expectations with schools recording local earthquakes down to magnitude 1, and large distant earthquakes. Some students participate in the program by looking up earthquake locations on maps and learning about geography, while other more advanced students have been investigating the frequency characteristics and sources of noise at their school. Both students and the schools are particularly proud that their instrument is contributing to the global scientific community and are actively incorporating seismology into the school curriculum.

AuSIS is funded by the Education component of AuScope Australian Geophysical Observing System. By mid-2014 we will build a network of 40 seismometers in high schools across the nation to provide real-time monitoring of the Australian continent and raise awareness of geoscience through observing our dynamic earth in motion. This program is unique to other seismometers in schools programs as it uses professional seismometers to provide research quality data to the seismological community. The AuSIS project’s educational aims are to:

- Raise community awareness of earthquakes;
- Raise awareness of seismology and geoscience, as a field of study;
- Promote science as a possible career;
- Provide a tool to teachers to assist in teaching physics and earth science.

The data schools collect is useful to researchers and will complement networks run by government and state agencies due to the high quality of the instruments and will be stored at internationally accessible and supported data management centres, such as IRIS. Data collected during the pilot program have provided clear recordings of both local and distant earthquakes. The project also involves an online education portal allowing access by students to earthquake recordings in their own and other schools. A growing community of volunteers is forming to support the program within their local area. Over the duration of the project these volunteers will enhance the project through provision of technical expertise as well as promotion within the education sector.