School Seismology Experiences in the UK

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In 2007 the British Geological Survey (www.bgs.ac.uk/ssp) in collaboration with the Science Enhancement Programme (www.sep.org.uk) developed a set of educational resources for secondary schools, an enquiry based learning project using earthquakes and seismology as a context. A booklet containing a set of simple classroom activities was published and distributed to over 4000 teachers across the UK. In addition a simple mechanical seismometer, optimised to detect the very weak signals generated by large distant earthquakes was designed and is now manufactured and distributed by an educational equipment supplier (www.mutr.co.uk). The project has worked closely with university geoscience departments to deliver a structured training program to teachers wishing to get involved in the project. At the start of 2011 over 300 schools across the UK have been supported in this way. The project has proven to have appeal with both Physics and Geology or Geography teachers. Since seismology is not a core part of the science curriculum in England, schools have found the project resources work best as an enrichment activity based around after-school science clubs or developing projects for entry to national science fair competitions. In 2009 the project was launched in Scotland which operates a completely different secondary school system to that in the rest of the UK and which has a greater emphasis on cross-curriculum activities and project work. The training course for teachers in Scotland was adjusted to take account of this and each school participating in the project sent two teachers (one physics and one geography) to the training courses.

Seismology is an inherently international subject and seismologists have always benefited from an open and global exchange of data. The school seismology project in the UK has used this international aspect of the science as a key driver to the project. Most of the earthquakes recorded by schools in the UK are large teleseismic events originating in the pacific “ring of fire”. Such events are recorded by seismic stations across the world. In 2010 the UK school seismology project linked its website database of submitted waveforms with that of the US seismograph in schools program, www.iris.edu/hq/sis and the Irish seismology in schools program, www.dias.ie/sis/ in 2011 we will begin linking databases with school projects in Europe. Several schools in the UK are also creating direct links with partner schools overseas, including schools in Montserrat in the Caribbean and Tristan da Cunha in the South Atlantic.