Geophysical Research Abstracts
Vol. 15, EGU2013-4874, 2013
EGU General Assembly 2013

New challenges for seismology and decision makers after L'Aquila trial

Warner Marzocchi
Istituto Nazionale di Geofisica e Vulcanologia, Roma, Italy (warner.marzocchi@ingv.it)

On 22 October seven experts who attended a Major Risk Committee meeting were sentenced to six years in prison on charges of manslaughter for underestimating the risk before the devastating 6.3-magnitude earthquake that struck the hillside city of L'Aquila on 6 April 2009, which caused more than 300 deaths. The earthquake followed a sequence of seismic events that started at the beginning of the year, with the largest shock – a 4.2-magnitude earthquake – occurring on 30 March. A day later, the seven experts met in L'Aquila; the minutes of the meeting, which were released after the quake, contained three main conclusions: that earthquakes are not predictable in a deterministic sense; that the L'Aquila region has the highest seismic hazard in Italy; and that the occurrence of a large earthquake in the short term was unlikely.

There is not doubt that this trial will represent an important turning point for seismologists, and more in general for scientists who serve as advisors for public safety purposes. Here, starting from the analysis of the accusations made by the prosecutor and a detailed scientific appraisal of what happened, we try to figure out how seismology can evolve in order to be more effective in protecting people, and (possibly) avoiding accusations like the ones who characterize the L'Aquila trial. In particular, we discuss (i) the principles of the Operational Earthquake Forecasting that were put forward by an international Commission on Earthquake Forecasting (ICEF) nominated after L'Aquila earthquake, (ii) the ICEF recommendations for Civil Protection, and (iii) the recent developments in this field in Italy. Finally, we also explore the interface between scientists and decision makers, in particular in the framework of making decisions in a low probability environment.