

of a Bomb in the River Danube

In the afternoon of 25th of August 2012 five strong-motion stations located in Vienna and four broadband stations of the Austrian Seismic Network registered a shock, which occurred due to the detonation of an aircraft bomb from the Second World War. As well 13 stations of the Czech Seismic Network including the auxiliary seismic IMS station VRAC recorded the event. Independent locations were conducted by Zentralanstalt für Meteorologie und Geophysik (ZAMG) and by the Institute of Physics of the Earth (IPE) and the hypocenter of the event was determined close to the Danube in Vienna by both institutes. The event could be localized with an accuracy of approximately one kilometer. Due to the registrations the exact time of detonation (14:47:08 MESZ) could be calculated. Analyzing the signal showed a clear arrival of the shear wave about one second after the arrival of the longitudinal wave. The long-period signals arriving about ten seconds later are probably caused by acoustic waves which have been generated by the underwater detonation.

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