



UNIBRA - the German contribution to the AlpArray Seismic Network

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AlpArray is a European initiative to advance our understanding of orogenesis and its relationship to mantle dynamics, plate reorganizations, surface processes and seismic hazard in the Alps-Apennines-Carpathians-Dinarides orogenic system (cited from the AlpArray Science Plan). The core of the AlpArray project is a dense seismic network covering the entire Alpine region including its forelands. The network is composed of about 600 broadband seismic sensors of which 280 are operated permanently by national institutions and the remaining 320 are deployed temporarily by project partners for a time span of at least 2 years. In a joint effort, German universities contribute 71 temporary stations to the AlpArray Seismic Network, of which 55 are located in southern Germany and 16 in Austria. The instrumentation of the stations is heterogeneous and comprises Streckeisen, Nanometrics and Guralp sensors operated with EarthData, Nanometrics and Quanterra data loggers. The instruments are installed in remote areas and rarely used buildings with power supply. Some stations transfer data via mobile internet connection. The data will be collected at national EIDA centers which also serve as nodes for dissemination of data to the members of the AlpArray working group. Here, we describe installation procedures and setting of the German UNIBRA (UNIversity BRoadband Array) stations. In addition, we present noise characteristics and first records of teleseismic earthquakes. The descriptions may serve as a reference for later work with data from the AlpArray Seismic Network.