



ORFEUS Broadband Seismic Data Collection Center

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The key data collection operations of the ORFEUS Data Centre (ODC) are build around the Antelope ® software to support real-time data acquisition and processing for the Virtual European Broadband Seismic Network (VEBSN). Within the operations the automatic quality monitoring of the waveform data is crucial as to detect problems in data in an early stage. The detection and event association within Antelope ® is applied within the VEBSN to compare the data quality from individual stations in a uniform way. On the other hand, results from this process are used to improve the detection and association process. Although detecting and locating earthquakes is not the primary goal at ODC it is our attempt to do this accurate for the purpose of quality control and the (automatic) generation of event-based waveform data. The results of the association and magnitude calculations can be used to find errors in the metadata for a single station or even an entire network. Our experience with Antelope ® applied on a dense, inhomogeneous European-scale seismic network is presented.