StationTool – Managing and Archiving Station Metadata of Finnish Seismological Network

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Institute of Seismology, University of Helsinki (ISUH) is responsible for maintaining the Finnish seismological network (HE). The network has currently 41 permanent stations and also various temporary stations. Each station has metadata, such as location and instrument data, related to it, which needs to be consistent and safe. Storing this information in ASCII-files is a simple, but outdated solution, as modern computing strives for consistency and ease of access. To address issues related to data validity and maintenance, we have been developing database management application called StationTool.

StationTool is a Python based QT-application for visualizing and managing station related information in an intuitive way. It is based on our NorDB database management module, which supports storing event and station metadata into a PostgreSQL database. StationTool protects the consistency station data and reduces the effects of human error. It also allows us to visualize information about our station network in various ways. StationTool will also ease the transition in integrating our station metadata with EPOS infrastructure. It will support various data storage and exchange standards, such as StationXML or CSS3.0 format.