Geophysical Research Abstracts Vol. 21, EGU2019-5723, 2019 EGU General Assembly 2019 © Author(s) 2019. CC Attribution 4.0 license.



Preliminary seismological monitoring for geothermal development in Vienna, Austria

Maria-Theresia Apoloner, Fee-Alexandra Rodler, Stefan Weginger, Yan Jia, and Wolfgang Lenhardt Zentralanstalt für Meteorologie und Geodynamik, Vienna, Austria (maria-theresia.apoloner@zamg.ac.at)

Possible geothermal water resources in the eastern part of Vienna could ideally provide hundreds of thousands of Viennese households with environmentally friendly heat and hot water. Currently the potential of low-lying hot water resources in this area is being explored geologically and geophysically.

For the development of geothermal projects like this one, studies of historical seismicity and monitoring of current seismicity are a basic requirement. Therefore a network of additional four seismic stations is deployed in the area.

The data will be used for earthquake detection and location. Additionally the recorded earthquakes will help the identification possible active fault zones in the vicinity. In the future the station network should also serve as a monitoring system for potential future geothermal use.