

With Citizen seismology, Everyone can become a seismologist!

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In collaboration with Stanford University and the US Geological Survey, a QCN (Quake Catcher Network) server for the Euro-Med region has been implemented at the EMSC (<http://qcn.emsc-csem.org>). The idea was to take advantage of the visibility of the EMSC in the Euro-Med countries to facilitate such deployments in the region.

Deployments of low-cost sensors are interesting especially in urban areas, where risk is high and spatially heterogeneous. There are several potential applications. The deployment of tens of sensors in high buildings could help for instance to monitor the different levels of shaking that affect a building during an earthquake. On a longer term, it could help to better understand the earthquake phenomenon and their effects on the structures.

Today, more than 120 sensors (USB or embedded in a laptop) send their data to the EMSC via QCN. Several deployments are currently in place in Patras, in Thessaloniki, in Lisbon and in Martinique Island (French Antilles).

Within the H2020 project N°654182 named ENVRIplus (<http://www.envriplus.eu/>), the EMSC developed a web interface to easily query and visualize the data of the sensors connected to EMSC-QCN server (<http://vigogne.emsc-csem.org/qcn/>). The main objective is to improve the participant retention and make a first step toward seismological trainings. The UI allows to:

- Show the available sensors in a given area
- Highlight the lack of data for each sensor and help the search for causes
- Easily access and download the data (in SAC format) or to retrieve a waveform in PNG

During spring 2016, the EMSC launched a call for volunteers in order to bring more people in the project. A dedicated webpage describes why and how join EMSC-QCN: <http://www.emsc-csem.org/service/QCN/>.

By sharing their data and finally better understanding the earthquakes and their effects, the citizen seismologists will help the community and improve their earthquake preparedness.