

An Urban strong ground motion network in the city of Chania, Crete. Preliminary results.

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Recently, a strong ground motion (SGM) network within the urban environment of the city of Chania installed and it is known as SaferChania (Seismic Acceleration For Earthquake Readiness in Chania). The concept of SaferChania is to establish a dense network of accelerometers, in order to establish a continuous monitoring of the historical city of Chania, a cultural monument of Southeastern Europe. All the useful acquired data will provide new information to the scientific community and can be used to alert the citizen and the Civil Protection authorities. Initially the strong ground motion network started operating in a learning phase including seven Reftek 130SM sensors. An ongoing development includes a mixing of advanced and low cost instrumentation. The SGM sensors are used to record the ground shaking in terms of acceleration and provide the peak ground velocity and acceleration for the different geological formations in the area. The available data after an earthquake, are analyzed, interpolated and represented in shake maps with the use of GIS software. The first results of the SGM operation during the recent 2016 seismic activity, demonstrating the potential character of the network and its ability to use for civil protection purposes.