



Earthquake Early Warning testing for Athens

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A dense high dynamic range seismic network is installed in the area of Gulf of Corinth (Central Greece) since August 2007 in order to implement and test early warning methodologies in the frame of the "SAFER" project. Gulf of Corinth is one of the most seismically active areas in Europe and represents one of the most important threats for the metropolitan area of Athens. We present the first results of testing the early warning methodology that was developed in Japan at NIED and is capable of locating earthquakes in a few seconds after the first P-wave arrival. This novel method of determining automatically earthquake focal parameters was initially deployed at Hinet real-time system since 2002.

The earthquake location is calculated by using the arrival times of only a few stations in relationship with the fact that P-waves have not arrived yet at other stations at a given time (T_{now}). In addition by using a few ten parameters, a very efficient P-wave picking procedure is implemented that performs automatic event classification and on-the-fly phase picks association. The first tests performed on off line network triggered data by using the same parameters tuned for the Japanese network.