

Introducing a free and open-source earthquake early warning display

Carlo Cauzzi (1), Yannik Behr (1), John Clinton (1), Philipp Kästli (1), Luca Elia (2), and Aldo Zollo (3)

(1) Swiss Seismological Service (SED), ETH Zürich, Switzerland, (2) AMRA Scarl, Naples, Italy, (3) Dipartimento di Fisica E. Pancini, Università degli Studi Federico II di Napoli, Naples, Italy

We present the earthquake early warning display (EEWD), a European effort to build a free and open-source software to display earthquake early warning (EEW) information. The EEWD is a client-side software that: (a) supports alerts generated by the main EEW algorithms used in Europe, starting with VS (www.seiscomp3.org/doc/jakarta/current/apps/vs.html) and PRESTo (www.prestoews.org/); (b) allows configuration of local ground-motion prediction equations (GMPEs), ground-motion to intensity conversion equations (GMICES) and local site effects; and (c) supports future developments for configuration based on end-user requirements. In addition to real-time operations, the EEWD can replay recorded real-time earthquake alerts and play scenarios. The EEWD can be viewed as a tool to broadcast real-time or near-real-time information to end users, including, but not restricted to, EEW alerts. The first public release of the EEWD is made available to interested users through the website of project REAKT (www.reaktproject.eu). Future versions and releases will be based on collaborative code development through GitHub (<https://github.com/SED-EEW/EEWD>). The EEWD is a key element within the framework of the European project EPOS (www.epos-ip.org), presently being implemented. The EEWD is already operated by selected academic and/or research institutions and private and public stakeholders in the Euro-Mediterranean region. We hope for a continued community effort, centered on this group, to maintain and improve the EEWD.