

WP 21: The web platform of European Facilities for Earthquake Hazard and Risk

(www.efehr.org)

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Keywords

Earthquake hazard, earthquake risk, seismic hazard, seismic risk, European Seismic Hazard Model (ESHM20), European Seismic Risk Model (ESRM20), web-platform, European Facilities of Earthquake Hazard and Risk (EFEHR)

Figure

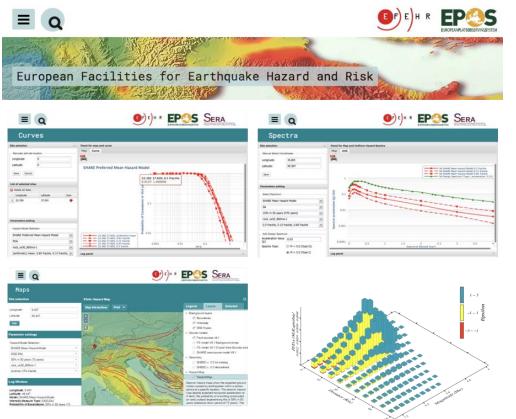


Figure 1. EFEHR web-portal: main web-interfaces to access the hazard curves (top left), uniform hazard spectra (top right), hazard maps (bottom left) and hazard disaggregation (bottom right)

Main Results

The <u>web platform</u> of European Facilities of Eartqhauke Hazard and Risk (EFEHR) provides access to specialized datasets, input models, results, documentation and information. Within SERA VA4 activities,



the web-platform has been further developed and upgraded, from web-content to web-viewers (i.e. hazard curves, maps and uniform hazard spectra). The web-services metadata has been upgraded to meet the EPOS-ICS requirements ensuring access in a fully discoverable, searching metadata environment of the <u>EPOS main services</u>. Model Development Tools (MDTs) and components for building and running the hazard models with OpenQuake are also provided. The web-traffic analytics of the EFEHR web-portal indicates a preference for users to access the hazard maps and uniform hazard spectra. The visitors are distributed worldwide. Oftenly, the visitors are consulting the hazard values at a specific site, rather than downloading entire sets of results and/or models. The hazard map viewer is the most used web application. Especially, after a destructive earthquake in the Euro-Mediterranean region occured, e.g. the 2019 M6.4 earthquake in Albania, the traffic of the web application increases shortly after the occurrence of an earthquake. The EFEHR data and models are collected and stored from completed scientific projects for long-term archiving, documentation, accessibility and use in research, support decision making and mitigation actions.

Access to Data and Services

EFEHR web-portal provides a single access point for data, models and results. No user authorization is required. Currently, the EFEHR web-portal provides open access to the following models:

- The 2020 European Hazard and Risk Model developed within the SERA JRA3 and JRA4
- The 2013 European Seismic Hazard Model (ESHM13, Woessner et al 2015)
- The 2014 Earthquake Model of the Middle East (EMME14, Giardini 2018)
- The 2015 Swiss Hazard Model (SuiHaz15, Wiemer et al 2015)

The 1999 Global Hazard Map of the Global Seismic Hazard Assessment Program (GSHAP, Giardini 1999)

Liability claim

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