

HELLENIC REPUBLIC MINISTRY OF DEVELOPMENT AND INVESTMENTS SPECIAL SECRETARIAT FOR ERDF & CF PROGRAMMES MANAGING AUTHORITY OF EPANEK





Co-financed by Greece and the European Union

REAL-TIME SHAKING MAPS (PGA & PGR) HELLENIC MACROSEISMIC DATABASE SEISMOLOGICAL LABORATORY – NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

The Seismological Laboratory hosts the Hellenic Macroseismic Database in its website. This database, host, besides macroseismic data, real-time shaking maps of Peak Ground Acceleration and Peak Ground Rotations (PGR).

How the system works is described in the main part of deliverable D 2.3.3 - ShakeMaps. The scope of this appendix is to provide guidance to the users of the site on how to navigate into the site, read and interpret the earthquake reports and relevant maps.

The website is accessible on the following web address:

http://macroseismology.geol.uoa.gr/realtime/index.htm

and available on two languages, English and Greek. Earthquake reports are provided only in English and are available in the homepage. A dedicated hyperlink redirects the user to each earthquake report.



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PART A: HOME PAGE

Home page is divided in 3 areas:

A) Area A: Logos.

B) Area b: Main information part.

C) Area C: IPR, copyright and disclaimer.

In Figure 1, these areas are presented schematically.

Area A is devoted to informative logos, and more specifically: left side: the National and Kapodistrian University logo, middle: hyperlink to the seismological laboratory homepage and right side: dissemination rules of the HELPOS project without moving up or down the cursor.

Area B is divided into two sub-areas, B1 to the left and B2 to the right. In areas B1, the user can find some useful information about the system and large earthquakes, described briefly. This side is updated from times to times, depending on significant earthquake occurrence. Area B2 is devoted to the list of earthquakes for which a report has been automatically generated. This area is updated every time an earthquake of magnitude 4 occurs or updates on existing earthquakes have been recorded.

Finally, area C provides useful information about copyright, intellectual property rights and disclaimer. All users of the website should carefully review this section before copying any of the data found useful on the website.

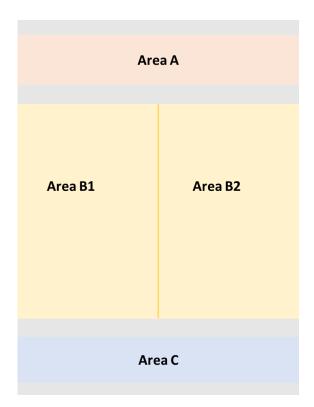


Figure 1. Structure of the home page <u>http://macroseismology.geol.uoa.gr/realtime/index.htm</u>.



Figure 2 provides a snapshot of the homepage in English and Figure 3 a snapshot of the homepage in Greek.

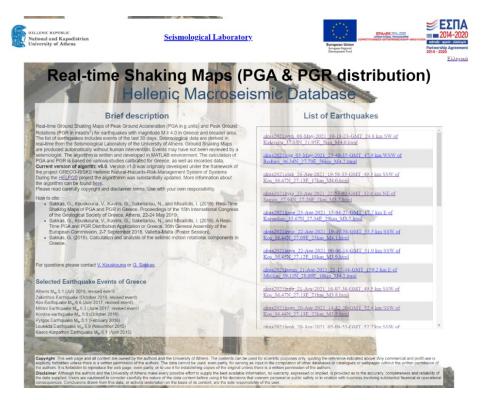


Figure 2. Snapshot of homepage in Greek.

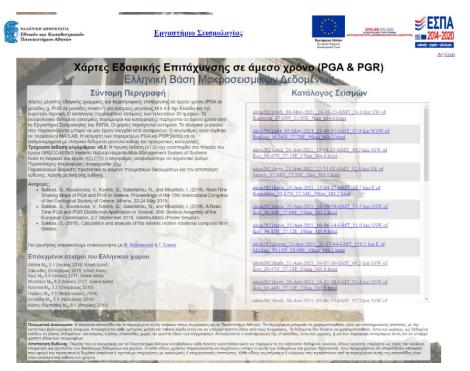


Figure 3. Snapshot of homepage in English.









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PART B: DESCRIPTION OF THE EARTHQUAKE REPORT

Earthquake reports generated automatically by the system are of two kinds: a) reports with shaking maps based only on modelled PGA data and b) reports with shaking maps created with modelled PGA data and real recordings. In Figure 4, an example for the second case is presented with the main sub-areas of the report presented.

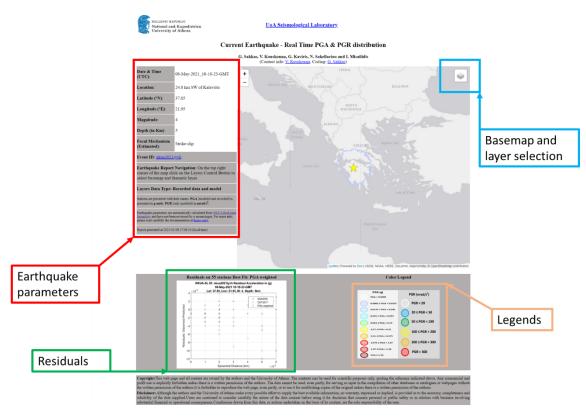


Figure 4. Earthquake report created with modelled and real PGA data.

The main difference between the two cases is the fact that in the second case (Figure 4) the values of PGA in various seismological stations (seismometers and accelerometers) are also provided, along with the differences in errors between the stations and the nearest calculated grid points. In addition, in this case, the PGA contours are calculated based on both modelled and real data. PGR data are based only in modelled data. Details on the estimations of PGA and PGR are described in detail in the main part of deliverable D2.3.3.

In the left part of the page the earthquake parameters and basic info on the available data are provided. The map pane occupies significant part of the report. By clicking on the layer button inside the map pane (top right corner), a menu of the available layers both for basemaps as well as the estimated and real data is possible. The user may change the basemap, between four different options, according to his/her needs and can enable or disable the estimated values of PGA and PGR as well as real data from stations. By default, the epicenter and contours of PGA are enabled and cannot be disabled. The various models for PGA are enabled









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by the user. The user can also see the PGA or PGR value at a grid point or a station by clicking directly on it through a popup information note. Legend for both PGA and PGR is provided below the map. The user can also zoom in or out according to its preferences. PGA contours are always based on the weighted mean of PGA (PGA weighted or PGA combined).