

*A Scientific Network for Earthquake, Landslide and
Flood Hazard Prevention - SciNetNatHazPrev*

A Web Tool for accessing Earthquake Data



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In a nutshell

- ❖ A database with earthquake data which will include information about earthquake events, accelerometer stations and recordings
- ❖ Publication of Greek Region earthquake data for years 1973 - 2009
- ❖ A web User Interface will allow public access to the data by providing the options to:
 - ◆ Search the database for recordings according to certain criteria
 - ◆ Download earthquake recordings
 - ◆ Online plot the recordings

In a nutshell

- ❖ The database will include information about
 - ◆ accelerometer stations (location, basic monograph data)
 - ◆ earthquake events (date, epicentre, magnitude, depth)
 - ◆ recordings (location, distance from the source, actual data)

Stations

- ❖ The tool will give access to recordings from the Greek National Network of Accelerometers
- ❖ A total of about 400 stations, 260 of them belonging to ITSAK
- ❖ Based on an older database, we will be adding about 300 new stations and updating the old ones
- ❖ Work has been done and is constantly in progress in providing documentation for each station (accessible from <http://monographs.itsak.gr>)

Events and Recordings

- ❖ Over 500 earthquake events will be accessible with $M > 4$ including the most important earthquakes in Greek Region since 1973
- ❖ Original earthquake recordings have been processed from scratch and stored in a common, widely accepted ASCII format
- ❖ Over 2500 earthquake recordings will be freely available for downloading

The User Interface

The tool will include three query forms to display listings of recordings, stations and events according to certain criteria

Recordings

- ❖ Search criteria will include date of the event, station, earthquake magnitude, region and other scientific quantities
- ❖ For each recording three different types of files will be available for downloading (unprocessed, processed, spectra)
- ❖ The user will have the option to display online a plot of the selected recording

The User Interface

Stations

- ❖ Search criteria will include region, basic monograph data
- ❖ A direct link to the station monograph in <http://monographs.itsak.gr> will be provided

Events

- ❖ Search criteria will include time period, region, magnitude

Current status

- ❖ Station information has been updated
- ❖ Recording files have been prepared
- ❖ We are working on associating events / stations / recordings and importing them into the database
- ❖ Plotting tool is under development
- ❖ A basic user interface is currently available, but we are working in providing a richer environment

A glimpse on the web GUI

Per Station View

Station

Station code: AGR1

Name:	Agrinio
Site:	Town Hall
Latitude:	38.621
Longitude:	21.406
Height:	0
Type of Building:	4-st R/C
Place of Installation:	Basement
Site class:	Alluvial deposits
Geo reference:	IGME, Geological Maps (1:50.000 scale).
Soil class:	D
Vs:	
History:	since 15/12/1981
Owner:	ITSAK

Date	Time	Epicentral distance	Uncorrected V1	Corrected V2	Spectra V3
17/01/1983	12:41:30	130.07	AGR18301.V1	AGR18301.V2	AGR18301.V3
22/01/1988	06:18:54	31.13	AGR18801.V1	AGR18801.V2	AGR18801.V3
08/03/1988	11:38:55	32.81	AGR18802.V1	AGR18802.V2	AGR18802.V3
26/06/1991	11:43:33	45.06	AGR19101.V1	AGR19101.V2	AGR19101.V3

Information about the station

Date of the earthquake

Recordings for each earthquake

A glimpse on the web GUI

Per Earthquake View

Event: 15/06/1995 | 00:15:50

Date:	15/06/1995
Time :	00:15:50
Latitude:	38.401
Longitude:	22.235
Depth:	17.6
MW:	6.4
ML:	5.6

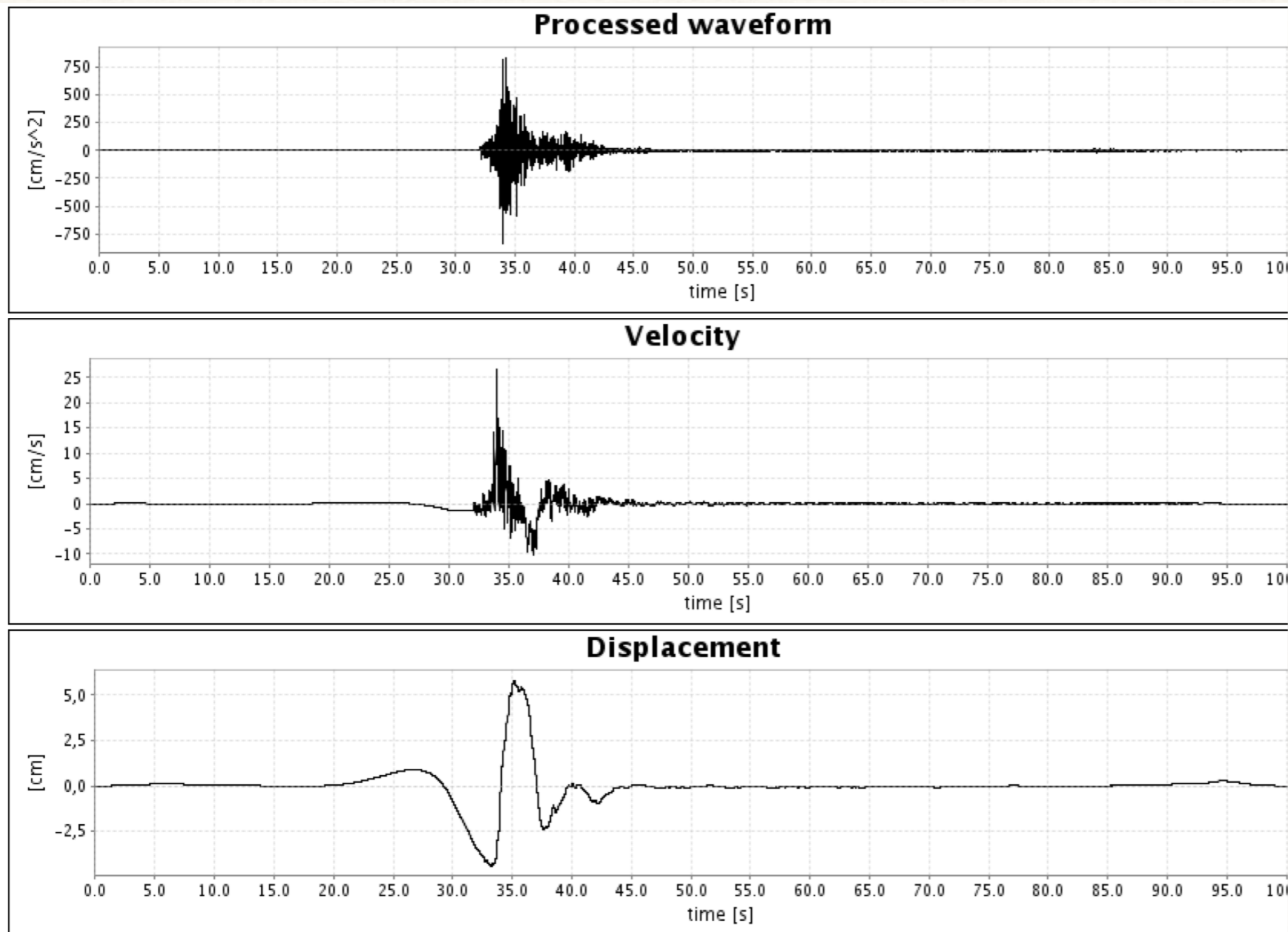
Station	Epicentral distance	Uncorrected V1	Corrected V2	Spectra V3
AGR1	76.17	AGR19501.V1	AGR19501.V2	AGR19501.V3
AIGA	21.56	AIGA9501.V1	AIGA9501.V2	AIGA9501.V3
AMIA	19.11	AMIA9501.V1	AMIA9501.V2	AMIA9501.V3
ATH3	137.13	ATH39501.V1	ATH39501.V2	ATH39501.V3
KOR1	79.76	KOR19501.V1	KOR19501.V2	KOR19501.V3
KORA	80.22	KORA9502.V1	KORA9502.V2	KORA9502.V3

Information about the earthquake

Station and distance from epicentre

Recordings for each station

A glimpse on the web GUI



Plotting example
of a recording

Thank you

Thank you for your attention!

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