

CURRICULUM VITAE

Areti Panou

Personal Information

Date of Birth: 20 March 1975
Place of Birth: Thessaloniki
Nationality: Greek
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Education

Academic degrees

Postdoctoral researcher. Faculty of Geosciences, Utrecht University, The Netherlands (9/2013 - 8/2015).

2007 PhD in Seismology, Aristotle University of Thessaloniki, Greece

2001 MSc in Geophysics, Aristotle University of Thessaloniki, Greece

1998 BSc in Physics, Physics University of Ioannina, Greece

Theses

Panou, A. A. Ambient noise measurements and correlation with seismic damage distribution in the city of Thessaloniki (Northern Greece), PhD Thesis, Geology Dept, Aristotle University of Thessaloniki. pp. 238, 2007 (in Greek).

Panou, A. A. Spectra analysis of earthquakes recordings applied to the Kozani-Grevena (1995) aftershock sequence, MSc Thesis, Geology Dept, Aristotle University of Thessaloniki. pp. 100, 2001 (in Greek).

Employment

2006-now Staff seismologist at the Seismological Station of the Aristotle University of Thessaloniki, Greece

2002-2006 Geophysicist for the Research Committee of the Aristotle University of Thessaloniki, Greece and I.T.S.A.K (Institute of Engineering Seismology and Earthquake Engineering), Thessaloniki, Greece.

1997-2002 Private physics tutor.

Publications

Theodulidis N., Dushi E., Duni L., Grendas I., Panou A. A., Hajrullai A., Kuka N. and Koci R. (2022), «Local Site effects Investigation in Durres city (Albania) Using Ambient Noise, after the 26 November 2019 (M6.4) Destructive Earthquake», *Applied Sciences* **2022**, *12*, **11309**.<https://doi.org/10.3390/app122211309>.

Karakostas, V., Papazachos, C., Papadimitriou, E., Foumelis, M., Kiratzi, A., Pikridas, C., Kostoglou, A., Kkallas, C., Chatzis, N., Bitharis, S., Chatzipetros, A., Fotiou, A., Ventouzi, C., Karagianni, E., Bonatis, P., Kourouklas, C., Paradisopoulou, P., Scordilis, E., Vamvakaris, D., Grendas, I., Kementzetzidou, D., Panou, A., Karakaisis, G., Karagianni, I., Hatzidimitriou, P. and Galanis, O. (2021), «The March 2021 Tyrnavos, central Greece, doublet (Mw6. 3 and Mw6. 0): Aftershock relocation, faulting details, coseismic slip and deformation», *Bulletin of the Geological Society of Greece*, **vol. 58**, **p. 131-178**.

Panou A. A., Hatzidimitriou P., Theodulidis N., Stylianidis K. C., Triantafyllidis P. and Zacharopoulos S. (2014), «Comparison of damage data from questionnaires and field survey: the case of the June 20, 1978 Thessaloniki (northern Greece) M6.5 earthquake», *Bulletin of Earthquake Engineering*, **12**, **2821-2841**.

Theodulidis N., Cultrera G., De Rubeis V., Cara F., Panou A. A., Pagani M., Teves-Costa P., (2008), «Correlation between damage distribution and ambient noise H/V spectral ratio: The SESAME project results», *Bulletin of Earthquake Engineering*, **6**, **109-140**.

Theodulidis, N., Roumelioti Z., Panou, A.A., Savvaidis A., Kiratzi A., Grigoriadis V., Dimitriou P. and Chatzigogos T. (2006), «Retrospective prediction of macroseismic intensities using strong ground motion simulation: the case of the 1978 Thessaloniki (Greece) earthquake (M6.5)», *Bulletin of Earthquake Engineering*, **4**, **101-130**.

Roumelioti, Z., Kiratzi, A., Theodoulidis, N., Panou, A. A., Savvaidis, A. and Benetatos C. (2006), «Earthquake ground motion scenarios in urban areas: the case of the city of Thessaloniki (northern Greece)», in *Geodynamics of Balkan Peninsula*, Editor: G. Milev; (Special Issue of Reports on Geodesy, Warsaw Univ. of Technology - Inst. of Geodesy and Geodetic Astronomy), **pp. 15**.

Panou A. A., Theodulidis N., Hatzidimitriou P., Stylianidis K., and Papazachos C. B. (2005), «Ambient Noise horizontal-to-vertical spectral ratio in estimating site effects and seismic damage distribution in urban

environment: The case of Thessaloniki city (Northern Greece)», *Soil Dynamics and Earthquake Engineering*, 25, 261-274.

Panou A. A., Theodulidis N., Hatzidimitriou P., Savvaidis A., and Papazachos C. B. (2005), «Reliability of ambient noise H/V spectral ratio in urban environment: The case of Thessaloniki city (Northern Greece)», *Pure and Applied Geophysics*, 162, 891-912.

Conference Presentations

Theodulidis N. et al., (2021), «Microzonation of the Durres city (Albania) using ambient noise», *Poster at the Assembly of the 37th General Assembly of the European Seismological Commission, September 2021*.

Paradisopoulou P. et al., (2018), «Impact of friction coefficient and fault parameters variation on Coulomb stress change analysis», *Poster at the Assembly of the 36th European Seismological Commission (E.S.C.), Valletta, September 2018*.

Panou A. A. et al., (2015), «First results of cross-correlation analysis of ambient seismic noise from the Hellenic Unified Seismic Network», *Poster at the Assembly of the European Geosciences Union (E.G.U.), Vienna, April 2015*.

Leventakis G. et al., (2008), «Earthquake damage distribution in metropolitan areas using the Questionnaire method: The case of the city of Thessaloniki (N. Greece)», *Proceedings of the 3rd Hellenic Conference Earthquake Engineering and Engineering Seismology, November 05-07, 2008 Paper # 1801*.

Panou A. A. et al., (2007), «Use of ambient noise for microzonation studies in urban environment: The city of Thessaloniki (N. Greece)», *Proceedings of the 4th International Conference on Earthquake Geotechnical Engineering Thessaloniki Greece, June 25-28, 2007 Paper # 1580*.

Savvaidis A. et al., (2006), «Accelerograph stations site characterization using ambient noise selected stations in Greece», *Proceedings of the 3rd International Symposium on the Effects of Surface Geology on Seismic Motion Grenoble, France, 30 August - 1 September 2006, Paper # 064*.

Panou A. A. et al. (2006), «Correlation of Ambient Noise Ground Vulnerability Index [Kg] with Earthquake Damage: The Case of the City of Thessaloniki (northern Greece)», *Poster at the 1th ECEES Conference, Geneva, September 2006*.

Theodulidis N. et al., (2005), «Retrospective prediction of macroseismic intensities using strong ground motion simulation: The case of the Thessaloniki 1978 earthquake (Mw6.5)», *Poster at the Assembly of the European Geosciences Union (E.G.U.), Vienna, April 2005*.

Panou A. A. et al. (2005), «Comparison between Ambient Noise Horizontal-to-Vertical Spectral Ratio and Theoretical Results in laterally varying Structures: The Case of the City of Thessaloniki (Northern Greece)», *Poster at the Assembly of the European Geosciences Union (E.G.U.), Vienna, April 2005*.

Theodulidis N. et al., (2004), «Empirical evaluation of the horizontal-to-vertical spectral ratio technique: results from the SESAME project», *Proceedings of the 13th World Conference on Earthquake Engineering, Vancouver, August 2004, Paper # 2323*.

Panou A. A. et al., (2004), «Modelling of ambient noise horizontal-to-vertical spectral ratio in laterally varying structures: The case of Thessaloniki (Northern Greece)», *Announcement at the Assembly of the XXIXth European Seismological Commission, Potsdam, September 2004*.

Kiratzis A. et al., (2005), «SEISIMPACT-THES: Scenario earthquake affecting the built environment of the prefecture of Thessaloniki», *Proceedings of the 10th International Congress of the Geological Society of Greece, Thessaloniki, April 2004*.

Panou A. A. et al., (2005), «Ambient Noise horizontal-to-vertical spectral ratio for assessing site effects in urban environments: The case of Thessaloniki city (Northern Greece)», *Proceedings of the 10th International Congress of the Geological Society of Greece, Thessaloniki, April 2004*.

Panou A. A. et al., (2005), «A source parameters study of the aftershock sequence of the Kozni-Grevena 1995 earthquake based on acceleration records», *Proceedings of the 10th International Congress of the Geological Society of Greece, Thessaloniki, April 2004*.

Panou A. A. et al., (2004), «A source parameters study of the aftershock sequence of the Kozani-Grevena 1995 earthquake based on acceleration records», *Poster at the 10th International Congress of the Geological Society of Greece, Thessaloniki, April 2004*.

Panou A. A. et al. (2004), «Ambient Noise horizontal-to-vertical spectral ratio for assessing site effects in urban environments: The case of Thessaloniki city (Northern Greece)», *Announcement at the 10th International Congress of the Geological Society of Greece, Thessaloniki, April 2004*.

Savvaidis A. et al., (2004), «Geophysical Information from ambient noise data: The case of Mygdonian basin», *Announcement at the 10th International Congress of the Geological Society of Greece, Thessaloniki, April 2004*.

- Kiratzi A. et al., (2004), «SEISIMPACT-THES: Scenario earthquake affecting the built environment of the prefecture of Thessaloniki», *Announcement at the 10th International Congress of the Geological Society of Greece, Thessaloniki, April 2004*.
- Atakan K. et al., (2004), «On the reliability of the H/V Spectral Ratio Technique», *Proceedings of ICSDEE & ICEGE 2004 (11th International Conference on Soil Dynamics & Earthquake Engineering and 3rd International Conference on Earthquake Geotechnical Engineering), Berkeley CA, 7-9th January 2004, Volume 2, pp. 1-8*.
- Panou A. A. et al., (2003), «Reliability tests of horizontal-to-vertical spectral ratio based on ambient noise measurements in urban environment: The case of Thessaloniki city (Northern Greece)», *Poster at the Assembly of the European Geophysical Society, the American Geophysical Union and the European Union of Geophysicists (E.G.S. - A.G.U. – E.U.G.), Nice, April 2003*.
- Panou A. A. et al., (2003), «Horizontal-to-vertical spectral ratio of ambient noise for assessing site effects in urban environment: The case of Thessaloniki city (Northern Greece)», *Announcement at the Assembly of the European Geophysical Society, the American Geophysical Union and the European Union of Geophysicists (E.G.S. - A.G.U. – E.U.G.), Nice, April 2003*.
- Scherbaum F. et al., (2002), «Determination of shallow shear wave velocity profiles using ambient vibrations at selected sites in Greece», *Poster at the Assembly of the American Geophysical Union (A.G.U.), December, 2002*.

Grants

2002-2005 Research grant “Heraclitus” from the Operational Programme for Education and Initial Vocational Training for my doctoral dissertation.

2000-2001 Greek State Scholarships Foundation grant for my performance during the first cycle of my postgraduate studies.

Teaching Experience

During my postgraduate studies and my tenure at the Seismological Station, I have worked as a teaching assistant for the Department of Geophysics of the Aristotle University of Thessaloniki, teaching the practical parts of 19 different undergraduate courses.

Computer Skills

Operating systems: Microsoft Windows, UNIX, MS-DOS

Computer Programming: Fortran, Unix shell scripting (sh, csh), DOS batch programming

Matlab Programming

Geographical Information Systems (ESRI ArcGIS: ArcMap & ArcScene, version 10)

Map and graph editing using the GMT (Generic Mapping Tools) software.

Geopsy (www.geopsy.org) software for processing ambient noise recording

Seiscomp3 software for processing seismological data

Microsoft Office software: Word, Excell, Access, Powerpoint

Training

March-June 2003 and **May-November 2004** Laboratory of Geophysics and Institute of Tectonics (LGIT) of the Joseph Fourier University in Grenoble, France (Prof. Pierre-Yves Bard and researcher Cecile Cornou), where I was trained in **numerical simulation and modelling of ambient noise**.

Specialized Knowledge

I have conducted **ambient noise measurements** (at a single station or in networks) at various environments at more than 10 sites around Greece. I had also maintained a **temporary local seismometer network** at the facilities of the Thessaloniki International Fair for the period November 2003 to March 2004. As part of my work at the Seismological Station I **locate earthquakes** recorded by the THE network. I also take part in **data exchange** as well as in informing the authorities, the public and the media on earthquake activity. I am part of the **monthly bulletin editing** team and the **analyst training** team. I am currently working on the evaluation of **macroseismic intensity** using questionnaires from the 1978 Thessaloniki Earthquake. This work is expected to be submitted for publication later this year (2012).

Seminars

I have participated in several seminars on issues related to my research and professional interests.

Research Programs

2002-2007 I took part in 4 research programs as a research partner of the Aristotle University of Thessaloniki and ITSAK (Institute of Engineering Seismology and Earthquake Engineering). This mainly involved ambient noise measurements and data analysis.

Languages

I am very good at understanding, reading and writing in English. My mother tongue is Greek.