

## BIOGRAPHICAL SKETCH

Nikos Kalligeris <sup>1</sup>

### Education :

PhD student, Civil Engineering, University of Southern California, USA	2012-
MSc, Environmental Engineering, Technical University of Crete, Greece	2010
MSc, Civil Engineering, Imperial College, University of London, UK	2005
BEng, Civil Engineering, University of Brighton, UK	2004

### Awards :

USC Myronis fellowship	2014-2015
USC Viterbi School of Engineering PhD. fellowship	2012

### Specialized Training :

- Training Course on Tsunami Numerical Modelling Course II - Tsunami Modelling, *UNESCO-IOC*, Melbourne, Australia, 10-19 January 2007.
- Advanced ComMIT course on Tsunami simulation, *EU project TRANSFER*, Cadiz, Spain, 1-2 April 2008.
- Workshop on Estimation and Prevention of Coastal Disasters due to Tsunami Impacts, *Solutions to Coastal Disasters Conference*, Oahu, Hawaii, 13-16 April 2008.

### Journal Publications :

- Borrero, J.C., P.J. Lynett and **N. Kalligeris**, Tsunami currents in ports, *Phil. Trans. R. Soc. A* 373: 20140372, 2015, doi.org/10.1098/rsta.2014.0372.
- Wei, Y., H.M. Fritz, V.V. Titov, B. Uslu, C. Chamberlin and **N. Kalligeris**, Source Models and Near-Field Impact of the 1 April 2007 Solomon Islands Tsunami, *Pure Appl. Geophys*, **172**(3), 2015, doi:10.1007/s00024-014-1013-6.
- Valle, B.L., **N. Kalligeris**, A.N. Findikakis, E.A. Okal and C.E. Synolakis, Plausible megathrust earthquakes in the eastern Mediterranean Sea, *Engineering and Computational Mechanics*, **167**, pp. 99-105, 2014.
- Borrero, J.C., **N. Kalligeris**, P.J. Lynett, H.M. Fritz, A.V. Newman and J.A. Convers, Observations and modeling of the August 27, 2012 earthquake and tsunami affecting El Salvador and Nicaragua, *Pure Appl. Geophys*, **171**(12), pp. 3421-3435, 2014, doi:10.1007/s00024-014-0782-2.
- Ebeling, C.W., E.A. Okal, **N. Kalligeris**, and C.E. Synolakis, Modern seismological reassessment and tsunami simulation of historical Hellenic Arc earthquakes, *Tectonophysics*, **530-531**, pp. 225-239, 2012.

---

<sup>1</sup>Address: Tsunami Research Center, Biegler Hall, University of Southern California, Los Angeles, California 90089-2531. Email kalliger@usc.edu Tel. (213) 740 5129

- Flouri, E.T., **N. Kalligeris**, G. Alexandrakis, N.A. Kampanis, C.E. Synolakis , Application of a finite difference computational model to the simulation of earthquake generated tsunamis, *Appl. Numer. Math.*, doi:10.1016/j.apnum.2011.06.003, 2011.
- Newman, A.V., L. Feng, H.M. Fritz, Z.M. Lifton, **N. Kalligeris**, Y. Wei, The energetic 2010 Mw 7.1 Solomon Island Tsunami Earthquake, *Geophys. J. Intl.*, **186**, pp. 775-781, 2011.
- Fritz, H.M., C.M. Petro, P.A. Catalan, R. Cienfuegos, P. Winckler, **N. Kalligeris**, R. Weiss, S.E. Barrientos, G. Meneses, C. Valderas-Bermeio, C. Ebeling, A. Papadopoulos, M. Contreras, R. Almar, J.C. Dominguez, C.E. Synolakis, Field Survey of the 27 February 2010 Chile Tsunami, *Pure Appl. Geophys*, **168**(11), pp. 1989-2010, doi:10.1007/s00024-011-0283-5, 2011.
- Moore, A., J. Goff, B.G. McAdoo, H.M. Fritz, A. Gusman, **N. Kalligeris**, K. Kalsum, A. Susanto, D. Suteja, C.E. Synolakis, Sedimentary deposits from the 17 July 2006 western Java tsunami, Indonesia: use of grain size analysis to assess tsunami flow depth, speed, and traction carpet characteristics, *Pure Appl. Geophys*, **168**(11), pp. 1951-1961, doi:10.1007/s00024-011-0280-8, 2011.
- Okal, E.A., C.E. Synolakis and **N. Kalligeris**, Tsunami Simulations for Regional Sources in the South China and Adjoining seas, *Pure Appl. Geophys.*, **168**(6-7), pp. 1153-1173, , 2011.
- Okal, E.A., C.E. Synolakis, B. Uslu, **N. Kalligeris**, and E. Voukouvalas, The 1956 earthquake and tsunami in Amorgos, Greece, *Geophys. J. Intl.*, **178**, pp. 1533-1554, 2009.
- Fritz, H.M., **Kalligeris, N.**, Borrero, J.C., Broncano, P., Ortega, E., The 15 August 2007 Peru tsunami runup observations and modeling, *Geophysical Research Letters*, **35**, L10604, doi: 10.1029/2008GL033494, 2008.
- Fritz, H.M., **Kalligeris, N.**, Ancestral heritage saves tribes during 1 April 2007 Solomon Islands tsunami, *Geophysical Research Letters*, **35**, L01607, doi:10.1029/2007GL031654, 2008.
- Fritz, H.M., W. Kongko, A. Moore, B. McAdoo, J. Goff, C. Harbitz, B. McAdoo, J. Goff, C. Harbitz, B. Uslu, **N. Kalligeris**, D. Suteja, K. Kalsum, V. Titov, A. Gusman, H. Latief, E. Santoso, S. Sujoko, D. Djulkarnaen, H. Sunendar, C. Synolakis., Extreme runup from the 17 July 2006 Java tsunami, *Geophysical Research Letters*, **34**, L12602, doi:10.1029/2007GL029404, 2007.

Other peer reviewed articles :

- Barberopoulou, A., J. C. Borrero, B. Uslu, **N. Kalligeris**, J. D. Goltz, R. I. Wilson, and C. E. Synolakis, New Maps of California to Improve Tsunami Preparedness, *Eos Trans. AGU*, **90**(16), doi:10.1029/2009EO160001, April 21, Cover Article, 2009.
- McAdoo, B.A., Fritz, H.M., Jackson, K.L., **Kalligeris, N.**, Kruger, J., Bonte-Graptent, M., Moore, A.L., Rafiau, W.B., Billy, D., Tiano, B., Solomon Islands tsunami, one year later, *Eos. Trans. AGU*, **89**(18):169-170, April 29, Cover Article, 2008.

#### Conference Proceedings :

- Maravelakis, N., **N. Kalligeris**, P.J. Lynett, V. Skanavis and C.E. Synolakis, A study of wave amplification in the Venetian harbor in Chania, Greece, *International Conference on Coastal Engineering*, Seoul, June 15 - 20, 2014.
- Synolakis, C.E., **Kalligeris, N.**, Foteinis, S., and Voukouvalas, V., The Plight of the Beaches of Crete, *Proceedings of the Solutions to Coastal Disasters Conference*, Oahu, Hawaii, April 13 - 16, 2008.
- Yalciner, A.C., A. Suppasri, E. Mas, **N. Kalligeris**, O. Necmioglu, F. Iamamura, C. Ozer, A. Zaytsev, N.M. Ozel, C.E. Synolakis, Amplification of Nearshore Tsunami Parameters during the Great East Japan Tsunami, *Proceedings of the International Union of Geodesy and Geophysics General Assembly (IUGG)*, Melbourne, Australia, June 28 - July 7, 2011.
- Synolakis, C.E., **Kalligeris N.**, Flouri, E., Alexandrakis, G. and Kampanis, N., The Great Cretan Splash Up-A Coastal Disaster Preparedness Exercise in Greece, *Proceedings of the Solutions to Coastal Disasters Conference*, Anchorage, Alaska, June 26 - 29, 2011.
- Ewing, L., Synolakis, C.E., **Kalligeris, N.**, Foteinis, S., and Voukouvalas E., The Role of Regional Sediment Management in Coastal Zone Management. *International Conference on Coastal Engineering*, Hamburg, August 31 - September 5, 2008.
- Synolakis, C.E., **Kalligeris, N.**, Foteinis, S., and Voukouvalas, V., The Plight of the Beaches of Crete, *Proceedings of the Solutions to Coastal Disasters Conference*, Oahu, Hawaii, April 13 - 16, 2008.
- Fritz, H.M., **Kalligeris, N.**, The April 2007 Solomon Islands Earthquake, Tsunami, and Land Level Changes, *Proceedings of the Solutions to Coastal Disasters Conference*, Oahu, Hawaii, April 13 - 16, 2008.

#### Conference Presentations and Short Abstracts :

- Lynett, P.J, **N. Kalligeris** and A. Ayca, Large-Scale Physical Modelling of Complex Tsunami-Generated Currents, *AGU Fall Meeting*, 15-19 December, San Francisco 2014, abstract No. S13E-07.
- Skanavis, V., Foteinis, S., Sartzetakis, G., S., Papadogiannis, K., **Kalligeris, N.**, Synolakis, C.,(2014), Erosion of the beaches of Crete, Greece, Abstract *AGU, Fall Meeting*, 15-19 December, San Francisco 2014, abstract No. OS23B-1195.
- Foteinis S. *et al.*, Anthropogenic erosion in Aghios Nikolaos, Greece, *EGU Spring Meeting*, 7-12 April, Vienna 2013, abstract No. EGU2013-9387.
- Valle B *et al.*, Tsunami simulations for historical and plausible mega-thrust events originating in the Eastern Mediterranean Sea, *EGU Spring Meeting*, 7-12 April, Vienna 2013, abstract No. EGU2013-12829.
- Ebeling C.W. *et al.*, Modern seismological reassessment and tsunami simulation of historical Hellenic Arc earthquakes, *EGU Spring Meeting*, 22-27 April, Vienna 2012, abstract No. EGU2012-11809.

- **Kalligeris N.** *et al.*, The AD 365 earthquake: high resolution tsunami inundation for Crete and full scale simulation exercise, *EGU Spring Meeting*, 22-27 April, Vienna 2012, abstract No. EGU2012-11787.
- Kanoglu, U., O. Hoto, **N. Kalligeris**, E. Flouri, B. Aydin, C.W. Moore and C.E. Synolakis, Tsunami propagation database for the Mediterranean and Aegean Seas, *AGU, Fall Meeting*, 3-7 December, San Francisco 2012, abstract No. NH33A-1666.
- Valle, B.L. **N. Kalligeris**, E.A. Okal, A.N. Findikakis and C.E. Synolakis, Tsunami simulations for plausible mega-thrust events originating along the Hellenic Arc and Cyprian Arc in the Eastern Mediterranean Sea, *AGU, Fall Meeting*, 3-7 December, San Francisco 2012, abstract No. NH33A-1668.
- Fritz H.M. *et al.*, The Chile tsunami of 27 February 2010: Field survey and modeling (invited), *AGU, Fall Meeting*, 5-9 December, San Francisco 2011, abstract No. S14A-03.
- Yalciner A.C. *et al.*, Field Survey on the Coastal Impacts of March 11, 2011 Great East Japan Tsunami, *AGU, Fall Meeting*, 5-9 December, San Francisco 2011, abstract No. NH11A-1360.
- Aydin, B., Moore, C.W., **Kalligeris, N.**, Kanoglu, U., Modeling of Tsunami Propagation and Inundation in the Aegean Sea, *AGU, Fall Meeting*, 5-9 December, San Francisco 2011, abstract No. NH21D-1532.
- Prasetya, T., Hajadi, P. Nugroho, C., Okal, E., Synolakis C., **Kalligeris, N.**, Field survey and preliminary modeling of the 2011 Tohoku tsunami at Jayapura, Papua, Indonesia, *AGU, Fall Meeting*, 5-9 December, San Francisco 2011, abstract No. NH11A-1351.
- Synolakis C.E., Fritz, H.M., Petrov, C., Catalan, P., Cienfuegos, R., Winkler, P., **Kalligeris, N.**, Weiss, R., Meneses, G., Valderas-Bermejo, C., Ebeling, C.W., Papadopoulos, A., Contreras, M., Almar, R., Dominguez, J.C. and Barrientos, S.E., Observations and modeling of the 27 February 2010 Tsunami in Chile, *AGU, Fall Meeting*, 13-17 December, San Francisco 2010, abstract No. G31B-03.
- **Kalligeris, N.**, Fritz, H.M., Newman, A.V., Feng, L., Lifton, Z.M., Wei, Y., Titov, V.V., Uslu, B.U., Comparison of the 2010 and 2007 Solomon Island Tsunamis, *AGU, Fall Meeting*, 13-17 December, San Francisco 2010, abstract No. NH12A-07.
- Fritz, H.M. *et al.*, Reconnaissance of the 27 February 2010 Tsunami in Chile, *AGU Americas Conference*, 8-12 August 2010, Foz do Iguassu, Brasil: abstract No. U41A-16.
- **N.Kalligeris**, E.A. Okal, C.E. Synolakis, Tsunami Simulations for Regional Sources in the South China and Adjoining Seas, *Geophysical Research Abstracts*, **Vol. 11**, EGU2009-4990-2, 2009, EGU General Assembly 2009.
- **Kalligeris N.**, Synolakis C.E., Okal E.A., Simulations of Tsunami Hazard from Regional Sources in the South China and Adjoining Seas, Presented at: *AGU, Fall Meeting 2008*, abstract No. OS54B-1317.
- Fritz, H M, **Kalligeris N.**, Tsunami Awareness Saves Solomon Islanders on 1 April 2007, Presented at: *AGU, Fall Meeting*, 10-14 December, San Francisco 2007.

Participation in EU Research Projects :

- Simulation Exercise POSEIDON: Earthquake followed by Tsunami in the Mediterranean Sea, European Union, European Civil Protection.
- TRANSFER, Tsunami Risk ANd Strategies for the European Region, European Union, Contr. no. 037058, 2006-2009.

Participation in NSF Research Projects :

- Tsunami Induced Coherent Structures and their Impact on our Coastal Infrastructure, NEES, NSF, United States.

Professional Expeditions - Field Surveys :

- The 17/7/06 Java, Indonesia earthquake and tsunami. 2/8-12/8/06
- The 1/4/07 Solomon Islands earthquake and tsunami. 10/4-23/4/07
- The 15/8/07 Pisco, Peru, earthquake and tsunami. 2/9-8/9/07
- The 3/1/10 Solomon Islands earthquake and tsunami 11/1-17/1/10
- The 27/2/10 Maule, Chile earthquake and tsunami 7/3-24/3/10
- The 14/3/11 Tohoku, Japan earthquake and tsunami 28/5-3/6/11

Participation in Laboratory Experiments :

- Laboratory experiments conducted in the tsunami basin of Oregon State University, between 10/13-10/14, as part of Phases 3&4 of NSF-NEES project with title *Tsunami Induced Coherent Structures and their Impact on our Coastal Infrastructure*.

Teaching Experience :

- Teaching Assistant, Water Resources, Department of Environmental Engineering, Technical University of Crete, Greece, fall semester of academic year 2006- 2007.
- Teaching Assistant, Environmental Hydraulics, Department of Environmental Engineering, Technical University of Crete, Greece, spring semester of academic year 2006-2007.

Professional Experience :

- Professional Civil Engineer, member of the Technical Chamber of Greece.

Other Personal Information :

- Languages : Greek, English and German
- Citizenships: Greek and Swiss