

Personal details

Name: Mathilde Bøttger Sørensen
Date of birth: 6 November 1978
Place of birth: Gudme, Denmark
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Education:

2003-2006: PhD from University of Bergen, Norway.
Thesis: Challenges in seismic hazard assessment – Analyses of ground motion modelling and seismotectonic sources
2000-2003: Cand. Scient. from University of Copenhagen, Denmark.
Thesis: Seismic tomography from the dispersion of Love waves.
1997-2000: Bachelor of Science in physics from University of Copenhagen, Denmark.
Thesis: Mapping of Moho depth under Greenland from seismic data.

Professional history:

2006-: Post-doctoral researcher at GFZ Potsdam, Section 5.3 (Engineering Seismology) working under EC project SAFER.
2003-2005: Research assistant at UNIFOB under the EU project RELIEF.
2002-2003: Research assistant under EU project SESAME.
2002-2005: ‘Avdelingsingeniør’ (department engineer) at Department of Earth Science, University of Bergen, Norway.

Research interests:

Seismic hazard assessment
Simulation of earthquake ground motion
Attenuation of macroseismic intensity
The relation between recorded ground motions and macroseismic intensity
Seismotectonics

Publications:

Gibbons, S.J., Sørensen, M.B., Harris, D.B. and Ringdal, F. (2007). The detection and location of low magnitude earthquakes in northern Norway using multi-channel waveform correlation, *Physics of the Earth and Planetary Interiors*, 160, 285-309.

Sørensen, M.B., Oprsal, I., Bonnefoy-Claudet, S., Atakan, K., Mai, P.M., Pulido, N. and Yalciner, C. (2006). Local site effects in Ataköy, Istanbul, Turkey, due to a future large earthquake in the Marmara Sea, *Geophysical Journal International*, 167,1413-1424, doi:10.1111/j.1365-246X.2006.03204.x.

Sørensen, M.B., Atakan, K., Pulido, N. (2007). Simulation of ground motions for the December 26, 2004 M=9.3 Sumatra earthquake. *Bulletin of the Seismological Society of America*, 97(1A), S139-S151, doi:10.1785/0120050608.

Sørensen, M.B., Ottemöller, L., Havskov, J., Atakan, K., Hellevang, B. and Pedersen, R.B. (in press). Tectonic processes in the Jan Mayen Fracture Zone based on earthquake occurrence and bathymetry, *Bulletin of the Seismological Society of America*, in press.

Sørensen, M.B., Atakan, K. and Pulido, N. (in press). Sensitivity of ground motion simulations to earthquake source parameters: a case study for Istanbul, Turkey, *Bulletin of the Seismological Society of America*, in press.