

Interesting Papers – Puget Sound/Seattle Basin Geology and Geophysics and Earthquake Hazards

- Atwater, B. F. (1992), Geologic evidence for earthquakes during the past 2000 years along the Copalis River, southern coastal Washington, *J Geophys Res*, 97(B2), 1901-1919.
- Barberopoulou, A., A. Qamar, T. L. Pratt, K. C. Creager, and W. P. Steele (2004), Local amplification of seismic waves from the Denali earthquake and damaging seiches in Lake Union, Seattle, Washington, *Geophys. Res. Lett.*, 31(3), 5.
- Blakely, R. J., R. E. Wells, C. S. Weaver, and S. Y. Johnson (2002), Location, structure, and seismicity of the Seattle fault zone, Washington; evidence from aeromagnetic anomalies, geologic mapping, and seismic-reflection data, *Bull. Geol. Soc. Am.*, 114(2), 169-177.
- Booth, D. B. (1994), Glaciofluvial infilling and scour of the Puget Lowland, Washington, during ice-sheet glaciation, *Geology*, 22(8), 695-698.
- Brocher, T. M., et al. (2001), Upper crustal structure in Puget Lowland, Washington; results from the 1998 seismic hazards investigation in Puget Sound, *J Geophys Res*, 106(B7), 13.
- Frankel, A. D., D. L. Carver, and R. A. Williams (2002), Nonlinear and linear site response and basin effects in Seattle for the M 6.8 Nisqually, Washington, earthquake, *Bull. Seism. Soc. Am.*, 92(6), 2090-2109.
- Frankel, A. D., W. J. Stephenson, and D. Carver (2009), Sedimentary Basin Effects in Seattle, Washington: Ground-Motion Observations and 3D Simulations, *Bull. Geol. Soc. Am.*, 99(3), 1579-1611.
- Frankel, A. D., D. L. Carver, E. Cranswick, M. E. Meremonte, T. Bice, and D. E. Overturf (1999), Site response for Seattle and source parameters of earthquakes in the Puget Sound region, *Bull. Seism. Soc. Am.*, 89(2), 468-483.
- Goldfinger, C., C. H. Nelson, and J. E. Johnson (2003), Deep-water turbidites as Holocene earthquake proxies: the Cascadia subduction zone and Northern San Andreas Fault systems, *Ann Geophys*, 46(5), 1169-1194.
- Hartzell, S., D. Carver, E. Cranswick, and A. D. Frankel (2000), Variability of site response in seattle, Washington, *Bull. Seism. Soc. Am.*, 90(5), 1237-1250.
- Haugerud, R. A., D. J. Harding, S. Y. Johnson, J. L. Harless, C. S. Weaver, and B. L. Sherrod (2003), High-resolution lidar topography of the Puget Lowland, Washington, *GSA Today*, 13(6), 4-10.

- Ichinose, G. A., H. K. Thio, and P. G. Somerville (2004), Rupture process and near-source shaking of the 1965 Seattle-Tacoma and 2001 Nisqually, intraslab earthquakes, *Geophys. Res. Lett.*, 31, L10604.
- Johnson, S. Y., C. J. Potter, J. M. Armentrout, J. J. Miller, C. A. Finn, and C. S. Weaver (1996), The southern Whidbey Island Fault; an active structure in the Puget Lowland, Washington, *Bull. Geol. Soc. Am.*, 108(3), 334-354.
- Lees, J. M., and R. S. Crosson (1990), Tomographic Imaging of Local Earthquake Delay Times for 3-Dimensional Velocity Variation in Western Washington, *J Geophys Res*, 95(B4), 4763-4776.
- Li, Q., W. S. D. Wilcock, T. L. Pratt, C. M. Snelson, and T. M. Brocher (2006), Seismic attenuation structure of the Seattle basin, Washington State, from explosive-source refraction data, *Bull. Seism. Soc. Am.*, 96(2), 553-571.
- Mazzotti, S., H. Dragart, R. D. Hyndman, M. M. Miller, and J. A. Henton (2002), GPS deformation in a region of high crustal seismicity: N Cascadia forearc, *Earth Planet Sci Lett*, 198(1-2), 41-48.
- Nelson, A. R., S. Y. Johnson, H. M. Kelsey, R. E. Wells, B. L. Sherrod, S. K. Pezzopane, L. A. Bradley, R. D. Koehler, and R. C. Bucknam (2003), Late Holocene earthquakes on the Toe Jam Hill fault, Seattle fault zone, Bainbridge Island, Washington, *Geol. Soc. Am. Bull.*, 115(11), 1388-1403.
- Pitarka, A., R. Graves, and P. Somerville (2004), Validation of a 3D Model of the Puget Sound Region Based on Modeling Ground Motion from the 28 February 2001 Nisqually Earthquake, *Bull. Geol. Soc. Am.*, 94(5), 1670-1689.
- Pratt, T. L., S. Y. Johnson, C. J. Potter, W. J. Stephenson, and C. A. Finn (1997), Seismic reflection images beneath Puget Sound, western Washington State; the Puget Lowland thrust sheet hypothesis, *J Geophys Res*, 102(B12), 27,469-27,489.
- Pratt, T. L., T. M. Brocher, C. S. Weaver, K. C. Creager, C. M. Snelson, R. S. Crosson, K. C. Miller, and A. M. Trehu (2003a), Amplification of seismic waves by the Seattle Basin, Washington State, *Bull. Seism. Soc. Am.*, 93(2), 533-545.
- Pratt, T. L., K. L. Meagher, T. M. Brocher, T. Yelin, R. D. Norris, L. Hultgrien, E. A. Barnett, and C. S. Weaver (2003b), Earthquake recordings from the 2002 Seattle Seismic Hazard Investigation of Puget Sound (SHIPS), Washington State, *Open File Rep U S Geol Surv*, 72.
- Riddihough, R. P. (1984), Recent movements of the Juan de Fuca plate system, *J Geophys Res*, 89(B8), 6980-6994.

- Satake, K., K. Wang, and B. F. Atwater (2003), Fault slip and seismic moment of the 1700 Cascadia earthquake inferred from Japanese tsunami descriptions, *J Geophys Res*, 108(B11), 17.
- Schultz, A. P., and R. S. Crosson (1996), Seismic velocity structure across the central Washington Cascade Range from refraction interpretation with earthquake sources, *J Geophys Res*, 101(B12), 27,899-827,915.
- Sherrod, B. L., T. M. Brocher, C. S. Weaver, R. C. Bucknam, R. J. Blakely, H. M. Kelsey, A. R. Nelson, and R. Haugrud (2004), Holocene fault scarps near Tacoma, Washington, USA, *Geology*, 32(1), 9-12.
- Snelson, C. M., T. M. Brocher, K. C. Miller, T. L. Pratt, and A. M. Trehu (2007), Seismic Amplification within the Seattle Basin, Washington State: Insights from SHIPS Seismic Tomography Experiments, *Bull. Seism. Soc. Am.*, 97(5), 1432-1448.
- Stephenson, W. J. (2007), Velocity and density models incorporating the Cascadia Subduction Zone for 3D earthquake ground motion simulation, *Open File Rep U S Geol Surv*, 2007-1348.
- Stephenson, W. J., A. Frankel, J. K. Odum, R. A. Williams, and T. L. Pratt (2006), Towards resolving an earthquake ground motion mystery in west Seattle, Washington state: shallow seismic focusing may cause anomalous chimney damage, *Geophys. Res. Lett.*, 33(6), L06316.
- Symons, N. P., and R. S. Crosson (1997), Seismic velocity structure of the Puget Sound region from 3-D non-linear tomography, *Geophys. Res. Lett.*, 24(21), 2593-2596.
- ten Brink, U. S., J. Song, and R. C. Bucknam (2006), Rupture models for the A.D. 900-930 Seattle Fault earthquake from uplifted shorelines, *Geology*, 34(7), 585-588.
- ten Brink, U. S., P. C. Molzer, M. A. Fisher, R. J. Blakely, R. C. Bucknam, T. Parsons, R. S. Crosson, and K. C. Creager (2002), Subsurface geometry and evolution of the Seattle fault zone and the Seattle Basin, Washington, *Bull. Seism. Soc. Am.*, 92(5), 1737-1753.
- Wells, R. E., and R. W. Simpson (2001), Northward migration of the Cascadia forearc in the northwestern U. S. and implications for subduction deformation, *Earth Planets Space*, 53(4), 275-283.
- Wells, R. E., C. S. Weaver, and R. J. Blakely (1998), Fore-arc migration in Cascadia and its neotectonic significance, *Geology*, 26(8), 759-762.
- Witter, R. C., H. M. Kelsey, and E. Hemphill-Haley (2003), Great Cascadia earthquakes and tsunamis of the past 6700 years, Coquille River estuary, southern coastal Oregon, *Bull. Geol. Soc. Am.*, 115(10), 1289-130