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Education

PhD, Geophysics, Scripps Institution of Oceanography, University of California-San Diego, 2013

MSc, Earth and Atmospheric Sciences, Georgia Institute of Technology, 2007

BSc, Physics, with honors, Georgia Institute of Technology, 2005

Relevant Professional Service

- UNAVCO Board of Directors, member, 2022-present
- Seismological Society of America Nominating Committee, member, 2021-present
- UNAVCO Geodetic Infrastructure Advisory Committee, member, 2021-present
- Associate Editor, *The Seismic Record*, 2021-present
- Associate Editor, *Seismological Research Letters*, 2017-2021
- Chair of IAG Working Group on High-rate GNSS for Geophysical Applications, 2020-present
- External early warning expert for World Bank, IDRIP project, 2019-present
- Chair of SA Geodetic Algorithm Testing and Implementation Subcommittee (GATIS), 2017-present
- Member of SA GMPE, R&D, and System Performance Working Groups, 2018-present
- AGU Geodesy Section Secretary, 2017-18

Relevant Publications ([Google Scholar Profile](#))

Crowell, B. W. (2021), Near-field strong ground motions from GPS-derived velocities for Intermountain Western United States Earthquakes in 2020, *Seismological Research Letters*, 92 (2A), 840-848, doi: 10.1785/0220200325.

Crowell, B. W., and D. Melgar (2020), Slipping the Shumagin Gap: A Kinematic Coseismic and Early Afterslip Model of the Mw 7.8 Simeonof Island, Alaska, Earthquake, *Geophys. Res. Lett.*, 47, e2020090308, doi: 10.1029/2020GL090308.

Melgar, D., **B. W. Crowell**, T. I. Melbourne, W. Szeliga, M. Santillan, and C. Scrivner (2020), Noise characteristics of real-time high-rate GNSS positions in a large aperture network, *J. Geophys. Res.*, 125, e2019JB019197, doi: 0.1029/2019JB019197.

Murray, J. R., **B. W. Crowell**, R. Grapenthin, K. Hodgkinson, J. O. Langbein, T. Melbourne, D. Melgar, S. E. Minson, and D. A. Schmidt (2018), Development of a geodetic component for the U. S. West Coast earthquake early warning system, *Seism. Res. Lett.*, 89, 2322-2336, doi: 10.1784/0220180162.

Crowell, B. W., D. Melgar, and J. Geng (2018), Hypothetical real-time GNSS modeling of the 2016 Mw 7.8 Kaikoura Earthquake: Perspectives from ground motion and tsunami inundation prediction, *Bull. Seism. Soc. Am.*, 108, 1736-1745, doi: 10.1785/0120170247.

Crowell, B. W., D. A. Schmidt, P. Bodin, J. E. Vidale, B. Baker, S. Barrientos, and J. Geng (2018), G-FAST earthquake early warning potential for great earthquakes in Chile, *Seism. Res. Lett.*, 89, 542-556, doi: 10.1785/0220170180.

Barbour, A. J., and **B. W. Crowell** (2017), Dynamic strains from earthquakes at local and regional distances, *Seism. Res. Lett.*, 88, 354-370, doi: 10.1785/0220160155.

Crowell, B. W., Y. Bock, and Z. Liu (2016), Single station automated detection of transient deformation in GPS time series with the relative strength index: A case study of Cascadian slow-slip, *J. Geophys. Res.*, 121, 9077-9094, doi: 10.1002/2016JB013542.

Crowell, B. W., D. A. Schmidt, P. Bodin, J. E. Vidale, J. Gomberg, J. R. Hartog, V. C. Kress, T. I. Melbourne, V. M. Santillan, S. E. Minson, and D. G. Jamison (2016), Demonstration of the Cascadia G-FAST geodetic earthquake early warning system for the Nisqually, Washington earthquake, *Seism. Res. Lett.*, 87, 930-943, doi: 10.1785/0220150255.

Crowell, B. W., D. Melgar, Y. Bock, J. S. Haase, and J. Geng (2013), Earthquake magnitude scaling using seismogeodetic data, *Geophys. Res. Lett.*, 40, 6089-6094, doi: 10.1002/2013GL058391.

Crowell, B. W., Y. Bock, D. T. Sandwell, and Y. Fialko (2013), Geodetic investigation into the deformation of the Salton Trough, *J. Geophys. Res.*, 118, doi: 10.1002/jgrb.50347.

Crowell, B. W., Y. Bock, and D. Melgar (2012), Real-time inversion of GPS data for finite fault modeling and rapid hazard assessment, *Geophys. Res. Lett.*, 39, L09305, doi: 10.1029/2012GL051318.

Bock, Y., D. Melgar, and **B. W. Crowell** (2011), Real-time strong-motion broadband displacements from collocated GPS and accelerometers, *Bull. Seism. Soc. Am.*, 101(5), doi: 10.1785/0120110007.

Crowell, B. W., Y. Bock, and M. B. Squibb (2009), Demonstration of earthquake early warning using total displacement waveforms from real-time GPS networks, *Seism. Res. Lett.*, 80 (5), 768-778, doi: 10.1785/gssrl.80.5.772.