Alon Ziv
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Research interest:

A. Ziv research aims at improving the understanding of earthquake mechanics. He combines data analysis and modeling, and recent work that he has done addresses issues related to modeling of geodetic deformation, ground motion prediction, and seismic source inversion. His research group is currently developing and testing a set of innovative earthquake early warning algorithms in Israel and India.

Selected publications:

Lior, I., and A. Ziv, The relation between ground motion, earthquake source parameters and attenuation: Implications for source parameter inversion and ground motion prediction equations, J. Geophys. Res., 2018.

Eisermann, A.S., A. Ziv, and G.H. Wust-Bloch, Array-based earthquake location for regional earthquake early warning: Case studies from the Dead Sea Transform, Bull. Seism. Soc. Am., 2018.

Ziv, A., Reconditioning fault slip inversions via InSAR data discretization, J. Seismol., 2016.

Ziv, A., Inference of coseismic slip via joint inversion of GPS and aftershock data: The 2004 Parkfield example, J. Geophys. Res., 2012.

Allen, R.M., and A. Ziv, Application of real-time GPS to earthquake early warning, Geophys. Res. Lett., 2011.

Ziv, A., On the nucleation of creep and the interaction between creep and seismic slip on rate- and state-dependent faults, Geophys. Res. Lett., 2007.

Ziv, A., On the role of multiple interactions in remote aftershock triggering: The Landers and the Hector Mine case studies, Bull. Seismol. Soc. Am., 2006.

Ziv, A., and J. Schmittbuhl, The seismic cycle and the difference between foreshocks and aftershocks in a mechanical fault model, Geophys. Res. Lett., 2003.

Ziv, A., and A. M. Rubin, Implications of rate-and-state friction for properties of aftershock sequence: Quasi-static inherently discrete simulations, J. Geophys Res., 2003.

Ziv, A., and A. M. Rubin, Static stress transfer and earthquake triggering: No lower threshold in sight?, J. Geophys. Res., 2000.