

## EILEEN L. EVANS – CURRICULUM VITAE

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U.S. Geological Survey  
345 Middlefield Road, MS 977  
Menlo Park, CA 94025  
Office: 650.329.4779

eevans@usgs.gov  
profile.usgs.gov/eevans  
Cell: 510.725.9278

### EDUCATION

<b>Harvard University</b> PhD in Earth and Planetary Sciences Advisor: Brendan J. Meade Dissertation: Geodetic imaging of fault system activity	Cambridge, MA 2014
<b>University of California, Berkeley</b> MA in Geophysics Advisor: Roland Bürgmann Research Project: 3D modeling of the Hayward-Calaveras fault system BA in Geophysics	Berkeley, CA 2008 2007

### RESEARCH EXPERIENCE

<b>Mendenhall research fellow</b> , U.S. Geological Survey	Menlo Park, CA
<ul style="list-style-type: none"><li>Quantifying variability in fault slip rate estimates from space geodetic data</li><li>Supervised by Drs. Wayne Thatcher, Fred Pollitz, and Jessica Murray</li></ul>	2014 – present
<b>Graduate research assistant</b> , Harvard University	Cambridge, MA
<ul style="list-style-type: none"><li>Used GPS, InSAR, and geologic data to constrain plate tectonic and earthquake cycle activity in Japan and the western United States</li><li>Supervised by Dr. Brendan Meade</li></ul>	2008 – 2014
<b>Graduate research assistant</b> , University of California, Berkeley	Berkeley, CA
<ul style="list-style-type: none"><li>Led GPS campaign of Hayward fault, modeled Hayward-Calaveras fault interactions</li><li>Supervised by Dr. Roland Bürgmann</li></ul>	2007-2008
<b>Undergraduate research assistant</b> , University of California, Berkeley	Berkeley, CA
<ul style="list-style-type: none"><li>Led GPS campaign of southern Hayward and Calaveras faults</li><li>Supervised by Dr. Roland Bürgmann</li></ul>	2006-2007

### TEACHING EXPERIENCE

<b>Teaching Fellow</b> , Harvard University Natural Disasters Introduction to Geological Sciences	Cambridge, MA Fall 2012 Fall 2010
<b>Graduate Student Instructor</b> , University of California, Berkeley Earthquakes in your Backyard Introduction to Earth and Planetary Sciences Structural Geology	Berkeley, CA Fall 2007 Spring 2008 Spring 2008

### PUBLICATIONS

EVANS, E.L., J.P. Loveless, and B.J. Meade (2015), Total variation regularization of geodetically and geologically constrained block models for the western United States, *Geophysical Journal International*

EVANS, E.L. and B.J. Meade (2012) Geodetic imaging of coseismic slip and postseismic afterslip: Sparsity promoting methods applied to the great Tohoku earthquake, *Geophysical Research Letters*.

EVANS, E.L., J.P. Loveless, and B.J. Meade (2012) Geodetic constraints on San Francisco Bay Area fault slip rates and potential seismogenic asperities on the partially creeping Hayward fault, *Journal of Geophysical Research*

#### MANUSCRIPTS

EVANS, E.L., W.P. Thatcher, F.F. Pollitz, and J.R. Murray (*submitted to USGS internal review*), Total variation regularization of geodetically and geologically constrained block models for the western United States

Barbour, A.J., EVANS, E.L., S.H. Hickman, M. Eneva, Subsidence rates at the southern Salton Sea well described by ongoing fluid-mass loss (*submitted to USGS internal review*)

#### INVITED TALKS

Berkeley Seismological Laboratory Seminar – “Geodetic imaging of the earthquake cycle,” February, 2015

USGS Earthquake Science Center Seminar – “Geodetic imaging of the earthquake cycle,” February, 2015  
Princeton University Solid Earth Geophysics Brown Bag Seminar – “Geodetic imaging of the 2011 great Tohoku earthquake with sparsity promoting methods,” April 2012.

Boston University Solid Earth Seminar – “Geodetic imaging of the 2011 great Tohoku earthquake with sparsity promoting methods,” April, 2012.

Appalachian State University Geology Department Seminar – “What can GPS tell us about great earthquakes and the thermal structure of subduction zones?” February, 2012.

#### HONORS AND AWARDS

Certificate of Distinction in Teaching 2010  
*Harvard University*

Outstanding Student Paper 2007  
*American Geophysical Union Fall Meeting*

#### ORAL CONFERENCE PRESENTATIONS

EVANS, E.L., B.J. Meade (2014), Quantizing the complexity of the western United States fault system with geodetically and geologically constrained block models, Abstract G14A-03 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec.

EVANS, E.L., B.J. Meade (2013), Sparse imaging of postseismic afterslip following the Tohoku earthquake, Abstract G32B-08 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.

EVANS, E.L., B.J. Meade (2012), Total variation denoising of interseismic deformation in Western North America, Abstract G22B-08 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.

EVANS, E.L., J. P. Loveless, B. J. Meade (2011), Sharpened images of the 2011 Tohoku-Oki earthquake from sparsity based methods, Abstract G44A-03 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-10 Dec.

#### POSTER PRESENTATIONS

EVANS, E.L., B.J. Meade (2014), Quantizing the complexity of the western United States fault system with geodetically and geologically constrained block models, Poster 229 presented at 2014 Fall Meeting, SCEC, Palm Springs, Calif., 8-11 Sept.

EVANS, E.L., B.J. Meade (2013), Sparse imaging of postseismic afterslip following the Tohoku earthquake, Poster 063 presented at 2013 Fall Meeting, SCEC, Palm Springs, Calif., 8-11 Sept.

EVANS, E.L., B.J. Meade (2012), Total variation denoising of interseismic deformation in Southern California, Abstract 212 presented at 2012 Fall Meeting, SCEC, Palm Springs, Calif., 9-12 Sept.

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EVANS, E.L., J.P. Loveless, B.J. Meade (2011), Sharpened views of the 2011 Tohoku-Oki earthquake from sparsity based optimization, Abstract A-043 presented at 2011 Fall Meeting, SCEC, Palm Springs, Calif., 11-14 Sept.

B.J. Meade, E.L. EVANS, J.P. Loveless (2011), Minimal models of fault slip in complex fault systems, Abstract presented at 2011 Fall Meeting, SCEC, Palm Springs, Calif., 11-14 Sept.

### POSTER PRESENTATIONS (CONTINUED)

EVANS E.L., B.J. Meade, J.P. Loveless (2010), Interseismic interactions in geometrically complex fault systems: Implications for San Francisco Bay Area creep and tectonics, Abstract T33B-2239 presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.

EVANS E.L., J.P. Loveless, B.J. Meade, R.Bürgmann (2009), Investigating fault coupling: Creep and microseismicity on the Hayward fault; *Eos Trans. AGU*, 90(54), Fall Meet. Suppl., Abstract G23B-0694

EVANS E.L., R. Bürgmann, B.J. Meade, N. Houlie, J.P. Loveless, R. Nadeau, G. Funning (2008), Subsurface Creep and geometry of the Hayward-Calaveras Stepover, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract S11A-1717

EVANS E.L., R. Bürgmann, R. Nadeau (2007), Linking faults: Subsurface creep on a contiguous fault structure connecting the Hayward and Calaveras faults; *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract S21A-0240

### SERVICE AND MEMBERSHIPS

Judge, Outstanding Student Presentation Awards, AGU Fall Meeting	2014 – present
Reviewer for <i>J. Geophys. Res.</i>	2015 – present
Reviewer for <i>Bull. Seis. Soc. Am.</i>	2014 – present
Reviewer for <i>Seis. Res. Lett.</i>	2014 – present
Seismological Society of America, member,	2014 – present
American Geophysical Union, member,	2007 – present