

People (Profile) *Paul Segall* has been updated.

Education

- 1981 | Ph.D. Geology Stanford University
- 1976 | B.A./M.S. Earth Sciences Case Western Reserve University

Professional Experience

- 2000 Visiting | Professor Insitute de Physique du Globe, Paris
- 1998 - Present | Professor Stanford University
- 1993 - 1998 | Associate Professor Stanford University
- 1991 | Visiting Associate Professor University of Grenoble
- 1989 - 1993 | Associate Professor (Research) Stanford University
- 1987 - 1989 | Consulting Professor Stanford University
- 1983 - 1993 | Project Chief Mechanics of Faulting and Fracturing, USGS
- 1981 - 1983 | Geologist USGS

Honors & Awards

- 2011 | William Smith Lecturer, Geological Society of London
- 2009 | Stanford Postdoctoral Mentoring Award (Honorable Mention)
- 2002 | Citation for Excellence in Refereeing, American Geophysical Union
- 1997 | Fellow, Geological Society of America
- 1990 | J.B. Macelwane Medal, American Geophysical Union
- 1990 | Fellow, American Geophysical Union
- 1984 | USGS Special Achievement Award

University Service

- 2013-2014 | Freshman Advisor
- 2010-2012 | Office of Judicial Affairs – Internal Review Panel
- 2005 - 2013 | Instructor, Stanford (Summer) Engineering Academy
- 2011 - 2012 |School of Earth Sciences Space Committee

2010 | Geoscape Bay Area: Teacher Professional Development Course on Volcanoes

2008 - 2010 | Admit Weekend Lecture

2005 - 2006 | Admit Weekend Lecture

2003 - 2004 | Associate Chair, Geophysics Department

2002 - 2004 | Member, Earth Sciences Council

2000 - 2001 | Alumni Weekend Lecture

2000 - 2001 | Member, University Needs Task Force on Information Technology

2000 - 2001 | Chair, C-ACIS Committee on Academic Computing and Information Services

1997 - 2000 | Member, C-ACIS Committee on Academic Computing and Information Services

1995 - 2005 | Freshman/Sophomore Advisor

1995 - 1998 | Chair, Geophysics Department Admissions Committee

1994 - 2007 | Chair, School of Earth Sciences Computer Committee

Professional Activities

2013 | U.K. National Centre of Earth Observation Assessment Panel

2013 | Invited Speaker, Hawaiian Volcano Observatory

2013 | Invited Speaker, Earthquake Research Institute, University of Tokyo

2013 | Invited Speaker, Oberlin College

2013 | NSF Panel: Frontiers of Earth System Dynamics

2012 | Earth and Ocean Sciences Colloquium, University of British Columbia.

2012 | Keynote speaker, Chapman Conference on Hawaiian Volcanism.

2011 | Keynote speaker, Seismic and aseismic deformation workshop, Strasbourg France.

2011 | Invited speaker, USGS Workshop on Great Cascadia earthquakes, Eugene Oregon.

2011 | Plenary speaker: Chapman Conference, The Galápagos as a Laboratory for the Earth Sciences, Puerto Ayora, Ecuador.

2011 | Invited Speaker, University of Kyoto, Disaster Prevention Research Institute.

2011 | Invited Speaker, Royal Society Workshop, Magma Migration, Storage and Eruption.

2011 | Chair Reid Medal Committee, Seismological Society of America

2011 | Invited Participant - USGS New Madrid Workshop

2011 | Invited Speaker - Univ. Colorado

2011 | Invited Speaker - J.R. Rice Symposium Caltech

2010 | Invited Speaker - Hawaiian Volcano Observatory

2010 | Invited Speaker - Earthscope Institute: Spectrum of Fault Slip Behavior

2009 | Invited presentation: UC Santa Cruz

2009 | Invited Keynote Speaker: Earthscope National Meeting

2009 | Invited Speaker: Workshop on Numerical Modeling of Crustal Deformation and Earthquake Faulting

2009 | Invited Seminar U.C. Berkeley

2009 | NSF Long Range Science Plan for Geodesy - Discussion Leader

2008 | Chair, U.C. Riverside IGPP External Review

2008 | Invited Presentation: Caltech Geological and Planetary Sciences

2008 | Invited Presentation: US Geological Survey

2008 | Invited Presentation: Volcano Deformation Workshop

2008 | Review Panel: Canadian Institute for Advanced Research

2008 | NSF Long Range Planning for Seismology Workshop

2007 | Invited presentation: IGPP U. C. San Diego

2007 | Invited presentation: Harvard University

2007 - Present | Southern California Earthquake Center Board of Directors

2007 | Invited Speaker: Euro-Conference - Rock Physics and Geomechanic

2006 | USGS working group on National Volcano Early Warning System extramural program

2006 | Invited presentation: SCEC/ERI Workshop

2006 | Chair, UNAVCO Nominating Committee

2005 | Invited Participant, Dahlem Workshop "Dynamics of Fault Zones", Berlin

2005 - 2008 | Donath Medal Committee, Geological Society of America

2005 | Invited presentation Purdue University 2005 Invited participant: Kavli Institute of Theoretical Physics "Fracture and friction from atomic to tectonic scales"

2004 | Newton Institute of Mathematical Sciences, School on physics of granular media

2003 | Invited Presentation, U.C. Riverside

2003 - 2004 | President, Tectonophysics Section, AGU

2003 - 2006 | Chair, Plate Boundary Observatory (Earthscope) Standing Committee

2003 | Coconvener, NSF/USGS sponsored workshop "volcanic processes in Long Valley Caldera - Mono Craters volcanic field"

2002 - 2006 | Department of Interior's Scientific Earthquake Advisory Committee

2002 | Invited Seminar, I.G.P.P., Scripps Institute of Oceanography

2002 | Invited Presentation, Academia Sinica, Taipei, Taiwan

2002 - 2009 | Member CEPEC, California Earthquake Prediction Evaluation Council

2002 | Invited Seminar, University of Southern California

2001 | Invited presentation: Caltech

2001 | Invited presentation: University of Utah, Rate Debate Workshop

2001 | Invited Presentation: University of Hawaii

2001 | Invited Presentation: Hawaiian Volcano Observatory

2001 | Invited Presentation: Whole Earth Seminar, U.C. Santa Cruz

2001 - 2003 | UNAVCO, Inc. Board of Directors

2000 - 2001 | UNAVCO (University Navstar Consortium) Steering Committee

2000 - 2002 | President Elect, American Geophysical Union, Tectonophysics Section

2000 - 2002 | American Geophysical Union Meetings Committee

2000 - 2001 | Invited Presentation: U.S.G.S. Workshop on New Madrid Earthquakes

2000 - 2001 | Invited Presentation: D.O.E. Workshop, Gaithersburg Md.

2000 - 2001 | Invited Presentation: E.G.S. Nice, France

2000 - 2001 | Invited Presentation: Institute de Physique du Globe, Paris, France

2000 - 2001 | Invited Presentation: Universite de Bretagne Occidentale, Brest, France

2000 - 2001 | Invited Presentation: Ecole Normale Supérieur, Paris, France

2000 - 2001 | Invited Presentation: Observatoire du Midi Pyrenees, Toulouse, France

2000 - 2001 | Invited Presentation: Stress Interactions Workshop, Erice, Italy

2000 - 2001 | Invited Presentation: 2nd Plate Boundary Observatory Workshop

2000 - 2001 | Invited Presentation: U.S.- Japan Conference on Earthquake Studies

2000 - 2001 | Invited Presentation: Southern California Earthquake Center (SCEC) Annual Meeting

2000 | CNRS review committee of Laboratoire de Tectonique-Mechanique de la Lithosphere, Institute de Physique du Globe, Paris

2000 - 2003 | UNAVCO (NSF GPS Facility) Board of Directors

1999 | Invited presentations: UNAVCO Annual Meeting

1999 | Invited presentations: AGU (Spring) | Meeting

1999 | Invited presentations: UCLA

1999 | Invited presentations: UNAVCO workshop on Volcano Deformation

1999 | Invited presentations: Plate Boundary Observatory Workshop, Snowbird, Utah

1999 | Invited presentations: GPS 99, Tsukuba, Japan

1999 | Invited presentations: Stanford University Statistics Department

1999 - 2002 | Member, Plate Boundary Observatory Steering Committee

1999 - 2000 | Member, NAS Committee to review the Volcano Hazards Program of the U.S. Geological Survey

1999 | Chair, UC Santa Cruz Tectonics Advisory Committee

1998 - 2002 | Southern California Integrated GPS Network Advisory Council

1998 | Invited lectures: IRIS Annual Meeting

1998 | Invited lectures: Special Session Organizer and Presentation, SSA Annual Meeting

1998 | Invited Symposium Presentation: Space-Based Geoscience Observations: Looking Down at the Future, University of Texas, Austin, Feb 5-6, 1998

1997 - 2000 | NSF Review Panel, Instruments and Facilities

1997 - 1998 | NASA, Solid Earth and Natural Hazards, Science Plan Committee

1996 - 1998 | James B. Macelwane Medal Committee, American Geophysical Union

1994 - Present | Science Advisory Team for Long Valley caldera, USGS

Courses Taught

2014 (Winter) | 288B Crustal Deformation [Enrolled 8]

2014 (Winter) | 385L Earthquake Seismology, Deformation, and Stress [Enrolled 12]

2014 (Spring) | 385L Earthquake Seismology, Deformation, and Stress [Enrolled 9]

2014 (Spring) | 289 Global Positioning System in Earth Sciences [Enrolled 7/10]

2014 (Spring) | 20N Predicting Volcanic Eruptions [Enrolled 12/15]

2013 (Fall) | 385L Earthquake Seismology, Deformation, and Stress [Enrolled 11]

2013 (Fall) | 288A Crustal Deformation [Enrolled 9]

2012 (Spring) | 385L Quake Seismology & Stress [Enrolled 9]

2012 (Winter) | 288B Crustal Deformation [Enrolled 6]

2012 (Winter) | 385L Quake Seismology & Stress [Enrolled 6]

2011 (Fall) | 288A Crustal Deformation [Enrolled 13]

2011 (Fall) | 385L Quake Seismology & Stress [Enrolled 10]

2010 (Summer) | 400 Geophysics Research [Enrolled 1]

2010 (Spring) | Sabbatical

2010 (Winter) | 385L Quake Seismology & Stress [Enrolled 10]

2010 (Winter) | 400 Geophysics Research [Enrolled 4]

2010 (Winter) | 802 TGR Dissertation [Enrolled 2]

2010 (Winter) | GP 113 Earthquakes and Volcanoes [Enrolled 3]

2010 (Winter) | Earth Systems 113 Earthquakes and Volcanoes [Enrolled 16]

2010 (Fall) | 385L Quake Seismology & Stress [Enrolled 9]

2010 (Fall) | 400 Geophysics Research [Enrolled 3]

2010 (Fall) | 802 TGR Dissertation [Enrolled 2]

2010 (Fall) | 281 Inverse Problems [Enrolled 14]

2010 (Fall) | Earth Sciences 117 Earth Sciences of Hawai'i [Enrolled 14]

2009 (Summer) | 802 TGR Dissertation [Enrolled 2]

2009 (Summer) | 400 Geophysics Research [Enrolled 2]

2009 (Fall) | 288A Crustal Deformation [Enrolled 11]

2009 (Fall) | 385L Quake Seismology & Stress [Enrolled 7]

2009 (Fall) | 400 Geophysics Research [Enrolled 3]

2009 (Fall) | 802 TGR Dissertation [Enrolled 1]

2009 (Winter) | 385L Quake Seismology & Stress [Enrolled 8]

2009 (Winter) | 288B Crustal Deformation [Enrolled 6]

2009 (Winter) | 400 Geophysics Research [Enrolled 2]

2009 (Winter) | 802 TGR Dissertation [Enrolled 2]

2009 (Spring) | 385L Quake Seismology & Stress [Enrolled 8]

2009 (Spring) | 400 Geophysics Research [Enrolled 3]

2009 (Spring) | 802 TGR Dissertation [Enrolled 2]

2009 (Spring) | 113 Earthquakes and Volcanoes [Enrolled 1]

2009 (Spring) | 113 Earthquakes and Volcanoes [Enrolled 13]

2008 (Fall) | 400 Geophysics Research [Enrolled 4]

2008 (Winter) | 802 TGR Dissertation [Enrolled 1]

2008 (Winter) | 400 Geophysics Research [Enrolled 2]

2008 (Winter) | 289 GPS in EarthScience (note 19 enrolled in AA272C) [Enrolled 2]

2008 (Fall) | 281 Inverse Problems (w/ Beroza) [Enrolled 11]

2008 (Fall) | 180 Inverse Problems (w/ Beroza) [Enrolled 4]

2008 (Fall) | 385L Quake Seismology & Stress [Enrolled 9]

2008 (Winter) | 385L Quake Seismology & Stress [Enrolled 9]

2008 (Spring) | 20Q Predicting Volcanic Eruptions [Enrolled 8]

2008 (Spring) | 113 Earthquakes and Volcanoes (w/Beroza) [Enrolled 45]

2008 (Spring) | 385L Quake Seismology & Stress [Enrolled 9]

2008 (Spring) | 400 Geophysics Research [Enrolled 3]

2008 (Spring) | 802 TGR Dissertation [Enrolled 1]

2008 (Summer) | 400 Geophysics Research [Enrolled 3]

2008 (Summer) | 802 TGR Dissertation [Enrolled 1]

2007 (Winter) | 400 Geophysics Research [Enrolled 3]

2007 (Winter) | 385L Quake Seismology & Stress [Enrolled 5]

2007 (Winter) | 802 TGR Dissertation [Enrolled 1]

2007 (Winter) | 288A Crustal Deformation [Enrolled 13]

2007 (Fall) | 385L Quake Seismology & Stress [Enrolled 5]

2007 (Fall) | 400 Geophysics Research [Enrolled 4]

2007 (Fall) | 802 TGR Dissertation [Enrolled 1]

2007 (Spring) | 288B Crustal Deformation [Enrolled 10]

2007 (Spring) | 802 TGR Dissertation [Enrolled 1]

2007 (Spring) | 113 Earthquakes & Volcanoes (w/Beroza) [Enrolled 41]

2007 (Spring) | 185L/385L Quake Seismology & Stress [Enrolled 7]

2006 (Spring) | 400 Geophysics Research [Enrolled 3]

2006 (Fall) | 120 Frontiers Geophysics Res. [Enrolled 15]

2006 (Fall) | 385L Quake Seismology and Stress [Enrolled 4]

2006 (Fall) | 180 Inverse Problems [Enrolled 11]

2006 (Fall) | 400 Geophysics Research [Enrolled 2]

2006 (Fall) | 802 TGR Dissertation [Enrolled 1]

2006 (Winter) | 385L Quake Seismology and Stress [Enrolled 5]

2006 (Winter) | 400 Geophysics Research [Enrolled 2]

2006 (Winter) | 802 TGR Dissertation [Enrolled 1]

2006 (Winter) | 289 Global Positioning [Enrolled 2]

2005 (Spring) | 801 TGR Project [Enrolled 1]

2005 (Spring) | 385L Quake Seismology and stress [Enrolled 5]

2005 (Winter) | GP 288 Crustal Deformation [Enrolled 6]

2005 (Fall) | GP 288 Crustal Deformation [Enrolled 10]

2005 (Winter) | GP 113/ES 113 Earthquakes & Volcanoes w/ Beroza [Enrolled 32]

2004 (Fall) | GP 180 Inverse Problems w/Beroza [Enrolled 7]

2004 (Fall) | GP 20Q Predicting Volcanic Eruptions [Enrolled 8]

2004 (Fall) | GP 289 Global Positioning [Enrolled 8]

2004 | GP 185L / 385L Quake Seismology and Stress [Enrolled 5]

2003 | GP20Q Predicting Volcanic Eruptions [Enrolled 8]

2003 | GP003 Earthquakes and Volcanoes (with Beroza) [Enrolled 11]

2003 | GP 385L Quake Seismology and Stress [Enrolled 6]

2003 (Fall) | GP 288 Crustal Deformation [Enrolled 6]

2003 | GP 385L Quake Seismology and Stress [Enrolled 6]

2002 | GP288 Crustal Deformation [Enrolled 11]

2002 | GP385L Quake Seismology and Stress (with Beroza, Zoback) [Enrolled 13]

2002 | GP185L Quake Seismology and Stress (with Beroza, Zoback) [Enrolled 3]

2002 | GP400 Geophysics Research [Enrolled 17]

2002 | GP399 Teaching Experience [Enrolled 1]

2002 | GP802 TGR Dissertation [Enrolled 2]

2001 | GP400 Research [Enrolled 4]

2001 | GP802 TGR Dissertation [Enrolled 2]

2001 | GP802 TGR Dissertation [Enrolled 2]

2001 | GP400 Research [Enrolled 4]

2001 | GP385 Earthquake Seismology (with Zoback, Beroza) [Enrolled 5]

2001 | GP004 Natural Hazards (with Beroza) [Enrolled 14]

2001 | GP180 Inverse Problems (with Beroza) [Enrolled 16]

2001 | GP399 Teaching Experience [Enrolled 1]

2001 | GP385 Quake Seismology (with Beroza, Zoback) [Enrolled 4]

2001 | GP185 Quake Seismology (with Beroza, Zoback) [Enrolled 1]

2001 | GP289 Global Positioning [Enrolled 7]

2001 | GP385 Quake Seismology (with Beroza, Zoback) [Enrolled 2]

2001 | GP399 Teaching Experience [Enrolled 1]

2001 | GP400 Research [Enrolled 2]

2001 | GP802 TGR Dissertation [Enrolled 2]

2001 | GP400 Research [Enrolled 4]

2001 | GP185 Quake Seismology (with Beroza, Zoback) [Enrolled 1]

2000 | GP385 Earthquake Seismology (with Zoback, Beroza) [Enrolled 8]

2000 | GP004 Natural Hazards (with Beroza) [Enrolled 27]

2000 | GP288 Crustal Deformation [Enrolled 10]

2000 | GP400 Research [Enrolled 12]

1999 | GP004 Natural Hazards (with Beroza) [Enrolled 29]

1999 | GP289 Global Positioning [Enrolled 9]

1999 | GP385 Earthquake Seismology (with Zoback, Beroza) [Enrolled 5]

1999 | GP400 Research [Enrolled 3]

1999 | GP180 Geophysical Inverse Problems (with Beroza) [Enrolled 15]

1998 | GP004 Natural Hazards (with Beroza) [Enrolled 45]

1998 | GP400 Research [Enrolled 12]

1998 | GP385 Earthquake Seismology (with Zoback, Beroza) [Enrolled 5]

1998 | GP385 Crustal Deformation [Enrolled 1]

1998 | GP288 Crustal Deformation [Enrolled 14]

Publications

2014* | Mavrommatis, A., P. Segall, and K. Johnson, A decadal-scale deformation transient prior to the Mw 9.0 2011 Tohoku-oki earthquake, *Geophys. Res. Letts*, in review.

2014* | Bartlow, N.M., L. M Wallace, R J Beavan, S Bannister, P Segall, Time-dependent modeling of slow slip events and associated seismicity and tremor at the Hikurangi subduction zone, New Zealand, *J. Geophys. Res. Solid Earth*, 119, 2169-9356, 10.1002/2013JB010609, 2014.

2013* | Anderson, K., and P. Segall, Bayesian inversion of data from effusive volcanic eruptions using physics-based models: Application to Mount St. Helens 2004-2008, *J. Geophys. Res.*, 2013, DOI: 10.1002/jgrb.50169, 2013.

2013* | Segall, P., Volcano Deformation and Eruption Forecasting, in *Remote Sensing of Volcanoes and Volcanic Processes*, Geol. Soc. London, 29p.

2013* | P. Segall, A. L. Llenos, S.-H. Yun, A. M. Bradley, E. M. Syracuse, Time-Dependent Dike Propagation From Joint Inversion of Seismicity and Deformation Data, *J. Geophys. Res.*, 118, 1–20, doi:10.1002/2013JB010251, 2013.

2012* | Johnson, K.M., J-I Fukuda, and P. Segall, Afterslip on historical earthquake asperities following the 2011 M9 Tohoku-oki, Japan earthquake, *Geophysical Research Letters*, 39, L20302, doi:10.1029/2012GL052901, 2012.

2012* | Segall, P. Understanding Earthquakes, *Science* **336**, 676 (2012); doi: 10.1126/science.1220946.

2012* | Segall, P. and A. M. Bradley, Slow-slip Evolves into Megathrust Earthquakes in 2D Numerical Simulations, *Geophysical Research Letters*. 39, L18308, doi:10.1029/2012GL052811, 2012.

2012* | Segall, P. and A. M. Bradley, The role of thermal pressurization and dilatancy in controlling the rate of fault slip, *Journal of Applied Mechanics*, 79, 2012, doi:10.1115/1.4005896.

2011 * | Montgomery-Brown, E. K., D. K. Sinnett, K. M. Larson, M. P. Poland, P. Segall, and A. Miklius, Spatiotemporal evolution of dike opening and décollement slip at Kīlauea Volcano, Hawai'i, *J. Geophys. Res.*, 116, B03401, doi:10.1029/2010JB007762.

2011 * | Anderson, K., and P. Segall, Ground deformation at effusively erupting volcanoes from physics-based models, I: Development and Analysis, *Jour. Geophys. Res.*, 116, B07204, doi:10.1029/2010JB007939.

2011 * | Schmitt, S.V, P. Segall, and T. Matsuzawa, Thermal pressurization during earthquake nucleation, *Jour. Geophys. Res.*, 116, B06308, doi:10.1029/2010JB008035, 2011

2011 * | Miyazaki, S.I., J. J. McGuire, and Paul Segall, Seismic and aseismic fault slip before and during the 2011 Tohoku Earthquake, *Earth Planets, and Space*, Vol. 63 (No. 7), pp. 637-642, 2011.

2011 * | Bartlow, N. M., S.I Miyazaki, A.M. Bradley, P. Segall, Space-time relationship of slip and tremor during the 2009 Cascadia slow slip event, *Geophysical Research Letters*, 38, L18309, 2011 doi:10.1029/2011GL048714.

2010 * | Anderson, K., M. Lisowski, and P. Segall. Cyclic ground tilt associated with the 2004-2008 eruption of Mount St. Helens, *J. Geophys. Res.*, 115, B11201, doi:10.1029/2009JB007102.

2010 * | Ohtani, R., J.J. McGuire, and P. Segall, The Network Strain Filter, a new tool for monitoring and detecting transient deformation signals in GPS arrays, *Jour. Geoph. Res.*, 115, B12418, doi:10.1029/2010JB007442.

2010 * | Segall, P. A. Rubin, A. M. Bradley, J.R. Rice, Dilatant Strengthening as a Mechanism for Slow Slip Events, *Jour. Geophys. Res.*, vol. 115, B12305, 37 PP., 2010 doi:10.1029/2010JB007449.

2010 * | Montgomery-Brown, E.K., K.M. Larson, D. Sinnett, M. Poland, P. Segall, A. Miklius, Spatio-temporal distribution dike opening and fault slip during the June 17-19, 2007 intrusion at Kilauea volcano, Hawaii, Jour. Geophys. Res., v. 115, B07405, doi:10.1029/2009JB006658, 2010.

2010 * | Segall, P., Earthquake and Volcano Deformation, Princeton University Press, 424, pp., 2010.

2009 * | Montgomery-Brown, E. K. P. Segall and A. Miklius, Kilauea slow-slip events: Identification, source inversions, and relation to seismicity, J. Geophys. Res, 114, B00A03, doi:10.1029/2008JB006074, 2009.

2008 * | Song, S.-G., G. C. Beroza, P. Segall, A Unified source model of the 1906 San Francisco earthquake, Bull. Seism. Soc. Amer, v. 98; no. 2; p. 823-831, 2008.

2008 * | Rivalta, E., and P. Segall, Magma compressibility and the missing source for some dike intrusions, Geophys. Res Lett., 35, L04306, doi:10.1029/2007GL032521, 2008.

2007 * | Desmarias, E.K., and P. Segall, Transient deformation following the January 30, 1997 dike intrusion at Kilauea Volcano, Hawaii, Bulletin Volcanology, 69 (4): 353-363, 2007.

2007 * | Hooper, A., P. Segall, H. Zebker, Persistent Scatterer InSAR for Crustal Deformation Analysis, with Application to Volcan Alcedo, Galapagos, J. Geophys. Res, 112, B07407, doi:10.1029/2006JB004763.

2007 * | Hsu, Ya-Ju, P. Segall, S.-B. Yu, and L.-C. Kuo,, Temporal and spatial variations of afterslip following the 1999 Chi-Chi, Taiwan earthquake, Geophysical Jour. International, 169, 367-379 doi: 10.1111/j.1365-246X.2006.03310.x, 2007.

2007 * | Yun, S., Zebker, H., Segall, P., Hooper, A., and Poland, M., Interferogram formation in the presence of large deformation, Geophysical Research Letters, 34, L12305, doi:10.1029/2007GL029745, 2007.

2007 * | Amelung, F., Yun, S., Walter, T., and Segall, P., Stress control of deep rift intrusion at Mauna Loa volcano, Hawaii, Science, Vol. 316. no. 5827, pp. 1026 – 1030 DOI: 10.1126/science.1140035, 2007.

2006 * | Johnson, K. M, and P. Segall, Kinematic and mechanical models of deformation in convergent plate boundary zones, J. Geophys. Res. In revision following review, 2006.

2006 * | Yun, S., P. Segall, and H. Zebker, Constraints on magma chamber geometry at Sierra Negra volcano, Galapagos Islands, based on InSAR observations. Journal of Volcanology and Geothermal Research; Feb 1 2006; v.150, no.1-3, p.232-243

2006 * | Miyazaki, S.-I., P. Segall, J. J. McGuire, T. Kato, and Y. Hatanaka, Spatial and temporal evolution of stress and slip rate during the 2000 Tokai slow earthquake, J. Geophys. Res., vol. 111, B03409, doi:10.1029/2004JB003426, 2006.

2006 * | Segall, P. and J.R. Rice, Does shear heating of pore fluid contribute to earthquake nucleation? J. Geophys. Res., 111, B09316, doi:10.1029/2005JB004129, 2006.

2006 * | Segall, P., E. K. Desmarais, D. Shelly, A. Miklius, and P. Cervelli, Earthquakes Triggered by Silent Slip Events on Kilauea Volcano, Hawaii, Nature, 442, p 71-74, doi:10.1038/nature04938, 2006.

2006 | Miklius, A. , P. Cervelli, M. Sako, M. Lisowski, S. Owen, P. Segall, J. Foster, K. Kamibayashi, and B. Brooks, Global Positioning System Measurements on the Island of Hawai`i: 1997 through 2004, U.S. Geological Survey Open-File Report 2005-1425, 2006.

2005 * | Yun, S.-H., H. Zebker, and P. Segall, On merging high and low resolution DEMs from TOPSAR and SRTM using a prediction error filter, IEEE Trans. Geosc. And Remote Sensing, July 2005; v.43, no.7, p.1682-1690

2005 * | Johnson, K. M, and P. Segall, A Viscoelastic earthquake cycle model for Taiwan, J. Geophys. Res. 110, B10404, doi:10.1029/2004JB003516, 2005.

2005 * | Murray, J. and P. Segall, Spatio-temporal evolution of a transient slip event on the San Andreas Fault near Parkfield, California, v.110, B09407, doi:10.1029/2005JB003651, 2005.

2004 * | Battaglia, M. and P. Segall, The Interpretation of Gravity Changes and Crustal Deformation in Active Volcanic Areas, *Pageoph. Vol. 161, no. 7, pp. 1453-1467, 2004.*

2004 * | Miyazaki, S., P. Segall, J. Fukuda, and T. Kato, Space Time Distribution of Afterslip Following the 2003 Tokachi-oki Earthquake: Implications for Variations in Fault Zone Frictional Properties, *Geophys. Res. Letters., Vol. 31, No. 6, L06623, 10.1029/2003GL019410, 2004.*

2004 | Hill D. and P. Segall, Understanding a large silicic volcanic system: an interdisciplinary workshop on volcanic processes in Long Valley Caldera - Mono Craters volcanic field, Workshop report, *Eos Trans. AGU, 85(23), 233, 10.1029/2004EO230005, 2004.*

2004 * | Johnson, K.M., and P. Segall, Imaging the ramp-decollement geometry of the Chelungpu fault using coseismic GPS displacements from the 1999 Chi-Chi, Taiwan earthquake, *Tectonophysics, 378, 123-139, 2004.*

2004 * | Johnson, K.M., and P. Segall, Viscoelastic cycle models of deep stress driven creep along the San Andreas Fault, *J. Geophys. Res., 109, B10403, doi:10.1029/2004JB003096, 2004.*

2004 * | Hooper, A , H. Zebker, P. Segall, B. Kampes, A New Method for Measuring Deformation on Volcanoes and Other Natural Terrains Using InSAR Persistent Scatterers, *Geophys. Res. Lett., Vol. 31, No. 23, L23611, 10.1029/2004GL021737, 2004.*

2003 * | Kenner, S. and P. Segall, Lower Crustal Structure in Northern California: Implications From Strain-Rate Variations Following the 1906 San Francisco Earthquake *J. Geophys. Res., VOL. 108, NO. B1, 2011, doi:10.1029/2001JB000189, 2003.*

2003 * | Battaglia, M., P. Segall, and Langbein, The mechanics of unrest at Long Valley caldera, California: 1, Source geometry from GPS, leveling, and EDM data, *Jour. Volcan. Geotherm. Res., v. 127, pp. 195-217, 2003.*

2003 * | Battaglia, M., C. Roberts, and P. Segall, The mechanics of unrest at Long Valley caldera, California: 2, Constraining the nature of the source using geodetic and micro-gravity data, *Jour. Volcan. Geotherm. Res., Jour. Volcan. Geotherm. Res., v. 127, pp. 219-245, 2003.*

2003 * | Miyazaki, Shin'ichi, J. McGuire, and P. Segall, A Transient Subduction Zone Slip Episode in Southwest Japan Observed by the Nationwide GPS Array, *J. Geophys. Res., VOL. 108, NO. B2, 2087, doi:10.1029/2001JB000456, 2003.*

2003 * | Jonsson, Sigurjon, Paul Segall, Rikke Pedersen, & Grimur Björnsson, Post-earthquake ground movements correlated to pore-pressure transients, *Nature, v. 424, p. 179-183, 2003.*

2003 * | McGuire, J.J. and P. Segall, Imaging of aseismic slip transients recorded by dense geodetic networks, *Geophys. J. Int., 155, 778-788.*

2003 * | Segall, P., S. Jonsson, K. Agustsson, When is the strain in the rock the same as the strain in the rock?, *Geophys. Res. Letters, v. 30, no 19, doi:10.1029/2003GL017995, 2003.*

2003 * | Mossop, A. and P. Segall. Injection induced stresses in geothermal fields. *J. Geophys. Res., in press.*

2002 * | Jonsson, S., H. Zebker, P. Segall, and F. Amelung, Fault slip distribution of the Mw 7.2 Hector Mine earthquake estimated from satellite radar and GPS measurements, *Bull. Seism. Soc. Amer., v. 92, 1377-1389, 2002.*

2002 * | Cervelli, P., A. Miklius, P. Segall, S. Owen, and M. Lisowski, The September 12, 1999 Upper East Rift Zone dike intrusion at Kilauea Volcano, Hawaii, *Journal of Geophysical Research, v. 107, No. B7, DOI 10.1029/2001JB000602, 2002.*

2002 * | Cervelli, P., P. Segall, K. Johnson, M. Lisowski, and A. Miklius, Sudden aseismic fault slip on the south flank of Kilauea volcano, *Nature., vol 415., pp. 1014-1018, 2002.*

2002 * | Hsu, Y.J., N. Bechor, P. Segall, S. B. Yu, and K.F. Ma, Rapid afterslip following the 1999 Chi-Chi, Taiwan, earthquake, *Geophys. Res. Letters, vol. 29, 16, doi: 10.1029/2002GL014967, 2002.*

2002 * | Segall, P., Integrating geologic and geodetic estimates of slip rate on the San Andreas fault system,

2002 * | Murray, J. and P. Segall, Testing time-predictable earthquake recurrence by direct measurement of strain accumulation and release, *Nature*, 419, p. 287-291, 2002

2002 * | Hooper, A. Paul Segall, Kaj Johnson, and Justin Rubinstein, Reconciling seismic and geodetic models of the 1989 Kilauea south flank earthquake, *Geophysical Res. Letters*, VOL. 29, NO. 22, 2002, doi:10.1029/2002GL016156, 2002.

2002 * | Burgmann, R., Ergintav, S., Segall, P., Hearn, L., McClusky, S., Reilinger, R. E., Woith, H. Zschau, J., Time-space variable afterslip on and deep below the Izmit earthquake rupture, *Bull. Seismosoc. Amer*, iv. 92, 126-137, 2002.

2001 * | Cervelli, P., M.H. Murray, P. Segall, Y. Aoki, and T. Kato. Estimating source parameters from deformation data, with an application to the March 1997 earthquake swarm off the Izu Peninsula, Japan. *J. Geophys. Res*, Vol. 106, p. 11,217-11,238.

2001 * | Johnson, K.M., Y.J. Hsu, P. Segall, and S.B. Yu, Fault Geometry and Slip Distribution of the 1999 Chi-Chi, Taiwan Earthquake Imaged from Inversion of GPS Data, *Geophys. Res. Letters*, vol. 28, 2285-2288.

2001 * | Murray, J., P. Segall, P. Cervelli, J. Svarc, W. Prescott. Inversion of GPS data for spatially variable slip-rate on the San Andreas Fault near Parkfield, CA. *Geophys. Res. Lett.*, v. 28, p. 359-362.

2001 * | Murray, M.H. and P. Segall, Modeling broadscale deformation in northern California and Nevada from plate motions and elastic strain accumulation, *Geophys. Res. Letters*, 28, 3215-3218, 2001.

2001 * | Larson, K.M., P. Cervelli, M. Lisowski, A. Miklius, P. Segall, and S. Owen, Volcano monitoring using kinematic GPS: Filtering strategies, *J. Geophys. Res.*, 106, 19,453-19,464.

2001 * | Segall, P., P. Cervelli, S. Owen, M. Lisowski, A. Miklius, Constraints on dike propagation from continuous GPS measurements, *J. Geophys. Res.*, 106, 19,301-19,318.

2000 * | Owen, S., P. Segall, M. Lisowski, M. Murray, M. Bevis, and J. Foster. The January 30, 1997 eruptive event on Kilauea Volcano, Hawaii, as monitored by continuous GPS. *Geophys. Res. Lett.*, v. 27, pp. 2757-2760.

2000 * | Owen, S., P. Segall, M. Lisowski, A. Miklius, R. Denlinger, and M. Sako, The rapid deformation of Kilauea volcano: GPS measurements between 1990 and 1996. *J. Geophys. Res.*, v. 105, pp. 18,983-18,998.

2000 * | Amelung, F., C. Oppenheimer, P. Segall, and H. Zebker. Ground deformation near Gada 'Ale volcano, Afar, observed by radar interferometry. *Geophys. Res. Lett.*, v. 27, no. 19, pp. 3093-3096.

2000 * | Kenner, S. and P. Segall. The Mechanics of Intraplate Earthquake Generation with Application to the New Madrid Seismic Zone, *U.S.A. Science*, v. 289, pp. 2329-2332.

2000 * | Segall, P., R. Burgmann, and M. Matthews, Time-dependent triggered afterslip following the 1989 Loma-Prieta earthquake. *J. Geophys. Res.*, v. 105, pp. 5,615-5,634.

2000 * | Amelung, F., S. Jonsson, H. Zebker, and P. Segall. Widespread uplift and trap door faulting on Galapagos volcanoes. *Nature*, v. 407, no. 6807, pp. 993 - 996.

2000 * | Kenner, S. and P. Segall. Postseismic deformation following the 1906 San Francisco earthquake. *J. Geophys. Res.*, v. 105, pp. 13,195- 13,209.

1999 * | Jonsson, S., H. Zebker, P. Cervelli, P. Segall, H. Garbeil, P. Mougini-Mark, and S. Rowland. A shallow-dipping dike fed the 1995 flank eruption at Fernandina volcano, Galapagos, observed by radar interferometry. *Geophysical Research Lett.*, v. 26, 1077-1080.

1999 * | Cervelli, P., S. Kenner, and P. Segall. Correction to "Dislocations in inhomogeneous media via a multi-perturbation approach: general formulation and 2-D solutions, by Y. Du, P. Segall and H. Gao. *J. Geophys. Res.*, v. 101, pp. 23,271-23,277.

1999 * | Aoki, Y., P. Segall, T. Kato, P. Cervelli, and S. Shimada. Imaging magma transport from inversion of deformation data: The 1997 seismic swarm off the Izu Peninsula, Japan. *Science*, v. 286, pp. 927-930.

1999 * | Freymueller, J.T., M.H. Murray, P. Segall, and D. Castillo. Kinematics of the Pacific-North America plate boundary zone, Northern California. *J. Geophys. Res.*, v. 104, pp. 7,419-7441.

1999 * | Battaglia, M., C. Roberts, and P. Segall. Magma intrusion beneath Long Valley caldera confirmed by temporal changes in gravity. *Science*, v. 285, pp. 2119-2122.

1999 * | Kenner, S. and P. Segall. Time dependence of the stress shadowing effect and its relation to the structure of the lower crust. *Geology*, v. 27, pp. 119-122.

1999 * | Mossop, A. and P. Segall. Volume strain within the Geysers geothermal field. *J. Geophys. Res.*, v. 104, pp. 113-129, 131.

1998 * | Pollitz, F., R. Burgmann, and P. Segall. Joint estimation of afterslip rate and postseismic relaxation following the 1989 Loma Prieta earthquake. *J. Geophys. Res.*, v. 103, pp. 26,975-26,992.

1998 * | Segall, P. and S. Fitzgerald. A note on induced stress changes in hydrocarbon and geothermal reservoirs. *Tectonophysics*, v. 289, pp. 117-128.

Advisee Degrees

2013 | Noel Bartlow: The physics of slow slip, tremor, and associated seismicity from geodetic and laboratory studies Ph.D. (Postdoc Scripps)

2011 | Kyle Anderson: The dynamics of effusive volcanic eruptions: Kinematic and physics-based inversions of observations at Mount St. Helens, 2004-2011, Ph. D. (Postdoc USGS).

2008 | Emily Montgomery-Brown: Time Dependent Deformation of Kilauea Volcano, Hawaii, Ph.D. (Postdoc)

2008 | Dan Sinnet, M.S. (Graduate Student)

2007 | Sang-ho Yun: A mechanical model of the large-deformation 2005 Sierra Negra Volcanic eruption derived from InSAR measurements (with Zebker), Ph.D. (J.P.L.)

2007 | Kyle Anderson, M.S. (Stanford, Grad student)

2006 | Andy Hooper: Persistent Scatterer Radar Interferometry for crustal deformation studies and modeling of volcanic deformation (with Zebker), Ph.D. (Delft University)

2005 | Emily Desmarais, M.S. (Stanford)

2004 | Kaj M. Johnson: Mechanical Models of Interseismic Deformation in California and Taiwan, Ph.D. (University of Indiana)

2003 | Jessica Murray: Deformation Studies at Parkfield, Ph.D. (U.S.G.S.)

2003 | Sang-Ho Yun, M.S. (Graduate Student)

2002 | Peter Cervelli: Using geodetic data to infer the kinematic and mechanical properties of deformation sources on Kilauea volcano, Hawaii, Ph.D. (U.S.G.S. Hawaiian Volcano Observatory)

2002 | Maurizio Battaglia: Unrest at Long Valley Caldera: GPS and gravity investigations, Ph.D. (U.C. Berkeley)

2002 | Antony Mossop: Seismicity, subsidence, and strain at The Geysers Geothermal field, Ph.D. (Sandia Labs)

2002 | Sigurjon Jonsson: Modeling volcano and earthquake deformation from satellite radar interferometric observations, Ph.D. (ETH, Zurich)

2000 | Jessica Murray, M.S. (Ph.D., Stanford)

2000 | Shelley Kenner: Mechanical modeling of time dependent deformation in the lower crust and its effect on earthquake recurrence, Ph.D. (University of Kentucky)

1999 | Susan Owen: GPS measurements and kinematic models of the surface deformation on Kilauea volcano, Hawaii, Ph.D. (U. of S. California)

1999 | Peter Cervelli, M.S. (Ph.D., Stanford)

1998 | Maurizio Battaglia, M.S. (Ph.D., Stanford)

1998 | Shelley Kenner, M.S. (Ph.D., Stanford)

1998 | David Lessick (with Howard Zebker), M.S. (Unknown)

Advisee Publications

2014 | Bradley, A. M., Software for efficient static dislocation-traction calculations in fault simulators, Bull. Seism. Soc, in review.

2012 | Bartlow, N. M., D. A. Locker, and N. M. Beeler (2012) Laboratory triggering of stick-slip events by oscillatory loading in the presence of pore fluid with implications for physics of tectonic tremor. *J. Geophys. Res.*, doi:10.1029/2012JB009452.

2011 | Bradley, A. M., "HMMVP: Software to Compute Matrix-Vector Products with an H-Matrix", [arXiv:1110.2807v1](#) [math.NA].

News & Media