

Rowena Benfer Lohman

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Education

- June, 2004* **California Institute of Technology**
Ph.D. Geophysics
Thesis title: “The Inversion of Geodetic Data for Earthquake Parameters”
- June, 1998* **California Institute of Technology**
B.S. Geology

Appointments

- 2022-present* Professor, Dept. of Earth and Atmospheric Sciences, Cornell
- 2015-2022* Associate Professor, Dept. of Earth and Atmospheric Sciences, Cornell
- 2007-2015* Assistant Professor, Dept. of Earth and Atmospheric Sciences, Cornell
- 2008-2010* Consultant, CalEnergy Operating Company
Provided expertise on ground deformation observations associated with pumping
- 2006-2007* Postdoctoral Scholar, Jet Propulsion Laboratory
Combining GPS and InSAR data in time series analyses
- 2004-2006* Postdoctoral Scholar, Woods Hole Oceanographic Institution
Examining long- and short-term seismic cycle processes
- 2002-2004* Consultant, URS Corporation
Provided precise earthquake locations for Comprehensive Test Ban Treaty (CTBT) program
- 2004* Assistant Scientist, Caltech Seismological Laboratory
Constraining slip distributions for subduction zone earthquakes

Honors and Awards

- 2013* Geodesy section award, American Geophysical Union
- 2011* James and Mary Tien Teaching Award
- 2010* NASA New Investigator Program
- 2010* Cornell Center for a Sustainable Future Faculty Fellow
- 2003* Outstanding GPS Poster Presentation, Caltech Graduate Science Symposium
- 1999* AGU Outstanding Student Paper Award, Geodesy Section
- 1999-2002* National Science Foundation Graduate Fellowship
- 1998* Henshaw Fellowship
- 1998* Fritz Burns Prize in Geology
- 1997* Rosalind W. Alcott Merit Scholarship
- 1997* Glamour Magazine Top Ten College Women of the Year
- 1996-1997* Howard Reynolds Memorial Prize in Geology
- 1993-1997* Joseph E. Terraciano Scholarship
- 1993* National Merit Scholarship

Teaching Experience

2008-present **Primary Instructor at Cornell University**

- EAS 2250: The Earth System (Fall 2019-2022)
Introductory course for the major, with lab (30-40 students)
- EAS 2550: Remote Sensing and GIS, Spring, 2012, 2015, 2017, 2018 (spring/fall), 2020,2021
Introductory course on the science addressed with remote sensing (20-49 students)
- EAS 1101: Climate and Energy, Fall 2017 (cotaught with Prof. Ault)
- EAS 4880: Global Geophysics, Spring, 2009, Fall 2010, Spring 2013, 2014
Undergraduate/graduate introduction to geophysics (16-19 students)
- EAS 4050: Active tectonics, Spring, 2008, Spring 2022
Advanced course on how earthquakes and volcanoes alter the landscape (6 students)
- EAS 7800: Earthquake record reading, Fall, 2009-2014
Advanced seminar on interpreting seismograms (3-13 students)
- EAS 6669: Earth Energy, Spring 2013, Fall, 2013, Spring 2015
Part of faculty team contributing lectures to module (~12 students)
Lectured on geodesy and inverse theory, participated in field trip to Iceland
- EAS 7810: Advanced topics in seismology, Fall, 2009
Seismology seminar with applications (with Profs. Kay and Brown, 8 students)
- EAS 7020: Thesis research/seminar, Spring, 2010-2011
Advanced seminar on classic papers in tectonics (4 students)

2008-present **Guest lecturer**

- EAS 1220: Earthquake! Spring, 2008-2009
75-minute lectures on remote sensing and tectonics to >100 non-majors
- EAS 2200: The Earth system, Spring, 2015
Part of lab, on time-varying digital elevation models
- EAS 4840: Inverse Methods in the Natural Sciences, Fall, 2010
Lecture on regression analysis and least squares
- CSS 6720: Nutrient Cycling in Natural and Managed Ecosystems, Fall 2012, 2014,2016
Lecture on remote sensing

1997-2003

Caltech Teaching Assistant

- Regional Field Geology of the Southwestern United States, 2003
Helped organize and lead 3-day field trip to Mojave Desert
- Structural Geology, 2003
Organized and supervised two 3-hour lab sessions each week
Assisted on introductory field mapping trip to Mojave Desert
Lectured in laboratory on geology of western United States
- Field Geophysics, 2002
Helped organize week-long geophysics field camp near Mono Lake, CA
Wrote software for use in the field
Instructed students on use of field instruments and data analysis tools
- Physical Geology, 2000
Graded homework, organized and supervised labs, helped plan field trip
- Earth and Environment, 1998-2000
Head TA in 2000, managing 15 other teaching assistants
Helped organize and lead field trip for >150 students
- Freshman field trip to Owens Valley, 1997
Organized 3-day field trip for ~30 freshmen from underrepresented minority backgrounds

Advising Experience

- Postdoctoral scholar, primary advisor:
 - Junle Jiang (2018-2020), Yusuf Molan (2020-)
- Graduate student major advisor:
 - William Barnhart (Ph.D., 2013)
 - Deformation Across The Seismic Cycle In Tectonically Active Regions: Imaging, Modeling, And Interpretations
 - Chelsea Scott (Ph.D., 2016)
 - Coseismic Deformation Observed with Radar Interferometry: Great Earthquakes and Atmospheric Noise
 - Kyle Murray (Ph.D., 2020)
 - Natural and anthropogenic crustal deformation observed by space-based geodesy
 - Paula Burgi (Ph.D., 2021)
 - There and Back Again: Exploring the Impact of Deforestation and Desiccation on InSAR Phase
 - Kelly Devlin (Ph.D., expected 2024)
 - Olivia Paschall (Ph.D., expected 2025)

 - Philip Nee (M.S., 2012)
 - Phase Unwrapping and Inversion Resolution Of Interferometric Synthetic Aperture Radar Geodesy
 - Veronica Prush (M.S., 2013)
 - Anthropogenic Signals Observed Using Interferometric Synthetic Aperture Radar In The Pacific Northwest
 - Benjamin Valentino (M.S., 2016)
 - Application of InSAR to Salt Mine Subsidence

 - Yukun Wu (M. Eng., 2020)
 - Chenyi Lu (M. Eng., 2022)
 - Guntae Park (M. Eng., 2022)
 - Yian Chen (M. Eng., 2022)
- Graduate student minor advisor:
 - Stephen Holtkamp (M.S., 2009)
 - Katrina Byerly (M.S., 2010)
 - Andrew Melkonian (Ph.D., 2015)
 - Anastasija Cabalova (Ph.D., 2016)
 - Nathan Stevens (M.S., 2018)
 - Catherine Lambert (M.S.)
 - Cindy Colon (Ph.D., Louisiana State University, external committee member)
 - Fanghui Deng (U. S. Florida, external committee member)
 - Angélique Benoit (École Normale Supérieure, external committee member)
- Graduate student external committee member at Cornell
 - Jose Cano, Hong-Yueh Lo
- Undergraduate research advisor:
 - Nathan Williams, Lauren Steinberg, Alexander Huth, Andreas Mavrommatis, Janice Lau, Kieran Dunne, Timothy Clements, Ariadna Lubinas, Pam Wildstein, Miranda Ong (from Earth observatory Singapore)

Peer-Reviewed Publications (students and postdocs in italics)

Bürgi, P. M., and R. B. Lohman, High-Resolution Soil Moisture Evolution in Hyper-Arid Regions: A Comparison of InSAR, SAR, Microwave, Optical, and Data Assimilation Systems in the Southern Arabian Peninsula, *J. of Geophysical Research: Earth Surface* 126.12, 2021

Jiang, J., and R. B. Lohman, Coherence-guided InSAR deformation analysis in the presence of ongoing land surface changes in the Imperial Valley, California, *Remote Sensing of Environment* 253, 2021.

Murray, K. D., Lohman, R. B., Kim, J., & Holt, W. E., An Alternative Approach for Constraining 3D-Displacements With InSAR, Applied to a Fault-Bounded Groundwater Entrainment Field in California, *J. of Geophysical Research: Solid Earth*, 126(5), 2021.

Murray K. D., R. B. Lohman, D.P.S. Bekaert, Cluster-Based Empirical Tropospheric Corrections Applied to InSAR Time Series Analysis, *IEEE Trans. Geosci. Rem. Sens.*, June, 2020.

Bürgi, P. M., R. B. Lohman, Impact of forest disturbance on InSAR surface displacement time series, *IEEE Trans. Geosci. Rem. Sens.*, May 2020.

Jordan, T. E., **R. B. Lohman**, L. Tapia, M. Pfeiffer, C. P. Scott, R. Amundson, L. Godfrey, R. Riquelme, Surface materials and landforms as controls on InSAR permanent and transient responses to precipitation events in a hyperarid desert, Chile, *Rem. Sens. Env.*, Feb. 2020

Murray, K. D., D. P. S. Bekaert, R. B. Lohman, Tropospheric corrections for InSAR: Statistical assessments and applications to the Central United States and Mexico, *Rem. Sens. Env.*, **232**, 2019.

Murray, K. D., R. B. Lohman, Short-lived pause in Central California subsidence after heavy winter precipitation of 2017, *Science Advances*, **4**, 2018.

Semple, A. G., M. E. Pritchard and R. B. Lohman, An incomplete inventory of suspected human-induced surface deformation in North America detected by satellite interferometric synthetic aperture radar, *Remote Sensing*, **9**, 2017.

Scott, C. P., R. B. Lohman and T. E. Jordan, InSAR constraints on soil moisture evolution after the March 2015 extreme precipitation event in Chile, *Scientific Reports*, **7**, 2017.

Colón, C., Webb, A.A.G., Lasserre, C., Doin, M.P., Renard, F., Lohman, R., Li, J. and Baudoin, P.F. The variety of subaerial active salt deformations in the Kuqa fold-thrust belt (China) constrained by InSAR. *Earth and Planetary Science Letters*, 450, pp.83-95, 2016.

Scott, C., and R. Lohman, Sensitivity of earthquake source inversions to atmospheric noise and corrections of InSAR data, *J. Geophys. Res.*, **121**, 4031–4044, 2016.

McGuire, J. J., **R. B. Lohman**, R. D. Catchings, M. H. Rymer and M. R. Goldman, Relationships between seismic velocity, metamorphism, seismic and aseismic fault slip in the Salton Sea Geothermal Field region, *J. Geophys. Res.*, **120**, 2015.

- Prush, V. B. and **R. B. Lohman**, Time-varying elevation change at the Centralia Coal Mine in Centralia, Washington (USA) constrained with InSAR, ASTER and optical imagery, *IEEE Sel. Topics. Appl. Ear. Obs. and Rem. Sens.*, **99**, 2014.
- Prush, V. B. and **R. B. Lohman**, Forest canopy heights in the Pacific Northwest based on InSAR phase discontinuities across short spatial scales, *Remote Sensing*, **6**, 3210-3226, 2014.
- Delgado F., M. E. Pritchard and **R. B. Lohman**, The 2011 Hudson volcano eruption (Southern Andes, Chile): Pre-eruptive inflation and hotspots observed with InSAR and thermal imagery, *Bulletin of Volcanology*, **76**, 815, 2014.
- Scott, C. P., **R. B. Lohman**, P. Alvarado, M. E. Pritchard, G. Sanchez, Andean earthquakes triggered by the 2010 Maule, Chile (Mw 8.8) earthquake: Comparisons of geodetic, seismic and geologic constraints, *J. South American Earth Sciences*, **50**, 27-39, 2014.
- Barnhart, W. D., **R. B. Lohman**, and R. J. Mellors, Active accommodation of plate convergence in Southern Iran: Earthquake locations, triggered aseismic slip, and regional strain rates, *J. Geophys. Res.*, **118**, 5699–5711, 2013.
- Barnhart, W. D. and **R. B. Lohman**, Characterizing and estimating noise in InSAR and InSAR time series with MODIS, *Geochemistry, Geophysics, and Geosystems*, **14**, 2013.
- Murray, J., **R. B. Lohman** and D. Sandwell, Combining GPS and Remotely Sensed Data to Characterize Time-Varying Crustal Motion, *EOS Trans. AGU (peer-reviewed)*, **94**, 309, 2013.
- Lohman, R. B.** and J. R. Murray, The SCEC geodetic transient detection validation exercise, *Seism. Res. Lett.*, **84**, 2013.
- Barnhart, W.D., and **R. B. Lohman**, Phantom earthquakes and triggered aseismic creep: Vertical partitioning of strain during earthquake sequence in Iran, *Geophys. Res. Lett.*, **40**, 2013.
- Barnhart, W.D., and **R. B. Lohman**, Regional trends in active diapirism revealed by mountain range-scale InSAR time series, *Geophys. Res. Lett.*, **30**, 2012.
- Devlin, S., B. L. Isacks, M. E. Pritchard, W. D. Barnhart and **R. B. Lohman**, Depths and focal mechanisms of crustal earthquakes in the central Andes determined from teleseismic waveform analysis and InSAR, *Tectonics* **31**, 2012.
- Barnhart, W.D., M. Willis, **R. B. Lohman** and A. Melkonian, InSAR and optical constraints on fault slip during the 2010-2011 New Zealand earthquake sequence, *Bull. Seism. Soc.*, **82**, 2011.
- Holtkamp, S.G., M.E.Pritchard, and **R. B. Lohman**, Earthquake swarms in South America, *Geophys. J. Int.*, **187**, 2011.
- Lohman, R. B.**, and W. Barnhart, Evaluation of earthquake triggering during the 2005-2008 earthquake sequence on Qeshm Island, Iran, *J. Geophys. Res.*, **115**, B12413, 2010.
- Barnhart, W. D., and **R. B. Lohman**, Automated fault model discretization for inversions for coseismic slip distributions, *J. Geophys. Res.*, **115**, B10419, 2010.
- Murray-Moraleta, J. and **R. B. Lohman**, Workshop targets development of geodetic transient

detection methods, *EOS Trans. AGU (peer-reviewed)*, **91**, No. 6, 2010.

Lohman, R.B., Crustal deformation during the seismic cycle, in *Encyclopedia of Complexity and System Science*, Springer publications, 1689-1704, 2009.

Finnegan, N., M. Pritchard, **R. Lohman** and P. Lundgren, Constraints on surface deformation in the Seattle, WA urban corridor from satellite radar interferometry time series analysis, *Geophys. J. Int.* **174**, 2008.

Lohman, R. B. and J. McGuire, Earthquake swarms driven by aseismic creep in the Salton Trough, CA, *J. Geophys. Res.*, **112**, 2007.

Lohman, R. B. and M. Simons, Some thoughts on the use of InSAR data to constrain models of surface deformation: Noise structure and data downsampling, *Geochemistry, Geophysics, and Geosystems*, **6**, 2005.

Lohman, R. B. and M. Simons, Locations of selected small earthquakes in the Zagros mountains, *Geochemistry, Geophysics, and Geosystems*, **6**, 2005.

Lohman, R. B., M. Simons, and B. Savage, Location and mechanism of the Little Skull Mountain earthquake as constrained by radar interferometry and seismic waveform modeling, *J. Geophys. Res.*, **107**, 2002.

Other Publications

Lohman, R. B., with input from NISAR science team, Managing resources underfoot, NISAR whitepaper, 2017.

Lohman, R. B., with input from NISAR science team, Understanding induced earthquakes, NISAR whitepaper, 2017.

Lohman, R. B., and V. Prush, ALOS-based constraints on tree heights in the Pacific Northwest, Alaskan SAR facility newsletter, 2014.

Lohman, R. B., ALOS imagery of earthquakes in Iran, Alaskan SAR Facility newsletter, 2010.

Lohman, R. B. and C. Williams, Assessing the effects of rigidity contrasts on earthquake source inversions using Pylith, Center for Infrastructure in Geodynamics One-Pager, 2009.

Invited Presentations

“Moving beyond phase in InSAR - trying to see through soil moisture and vegetation when we study ground deformation”

MIT geophysics seminar series, 2022

"100 years of InSAR - setting the stage for a new era of imaging geodesy"

American Geophysical Union Annual Meeting, 2019

"Soil moisture effects on InSAR time series in hyperarid (and not-so-arid) environments"

Keynote talk, Center for the Observation and Modeling of Earthquakes, Volcanoes & Tectonics (COMET), York, June, 2019

"InSAR and water - observations of aquifer depletion and the impact of soil moisture on SAR timeseries"

Geophysics group seminar, University of Bristol, February, 2019

"InSAR and water - observations of aquifer depletion and the impact of soil moisture on SAR timeseries"

Department Seminar, University College London, February, 2019

“The geodetic signature of human-induced earthquakes – what we can and can’t detect”

INTOC symposium, Cornell, September, 2017

“InSAR challenges in a range of terrain, land cover and signal types”

Department Seminar, University of Leeds, June 2016

“Combining InSAR and GPS data for use in model-driven or exploration-driven research”

Brownbag Seminar, University of Bristol, May 2016

“Expanding InSAR into new areas – from upstate New York to the Cascades”

Department Seminar, University of Bristol, May 2016

“Expanding InSAR into new areas – from upstate New York to the Cascades”

Department Seminar, University of Oxford, March 2016

“Cascades of InSAR in the Cascades”

American Geophysical Union Annual Meeting, San Francisco, CA, December, 2015

“Vegetation, smevgetation: Exploring the use of InSAR in historically challenging environments”

American Geophysical Union Annual Meeting, San Francisco, CA, December, 2015

“Geodetic imaging of earthquake sources – from high rate GNSS to InSAR and beyond”

SCEC-ERI summer school, Mt. Fuji, Japan, September 2015.

“Anthropogenic (?) signals in InSAR”

Department Seminar, Purdue University, October, 2014

“Ingestion and interpretation of large sets of geodetic imagery”

UNAVCO Science workshop, March, 2014

“InSAR observations of environmental change”

Brown University, Department of Geology fall colloquium, September, 2013

“Geodetic Transient Detections”

SCEC leadership retreat, Palm Springs, June, 2013.

“Example Prototype: Geodetic transient detection”

SCEC CSEP workshop on testing external forecasts and predictability, May, 2013

“InSAR surprises: Cases where the primary signal source is not what we expected”

American Geophysical Union annual meeting, December, 2012

“Ground deformation from earthquakes, slow faults, and logging in the Pacific Northwest”

SACNAS annual meeting, Seattle, October 2012

“Geodetic Source Inversion Validation”

- Community Finite Element Modeling workshop, Golden, Colorado, June 2012 (remotely)*
 “Interferometric Synthetic Aperture Radar (InSAR): A review and applications ranging from tectonics to the carbon budget”
Department seminar, Louisiana State University, June, 2012
- “A spectrum of InSAR observations: from earthquakes to the carbon cycle”
Brownbag seminar, Princeton University, March, 2012
- “Active processes modifying the continent – Earthquakes”
Earthscope workshop on targets in Alaska anticipating USARRAY, invited w/ Chen Ji, May, 2011
- “Geodetic observations of transient deformation in Southern California - How do we determine which ones are “real”?”
Earthscope workshop spectrum of fault slip behaviors, keynote speaker, October, 2010
- “The Community Geodetic Model”
Southern California Earthquake Center Site Review, June, 2010
- “Introduction to CUBIT: A quick tutorial and some simple examples”
Community Finite Element Modeling workshop, Golden, Colorado, June, 2010
- “Confidence estimates on inferred earthquake source parameters: Applications to Nuclear Test Ban Treaty verification and seismic hazard assessment”
Inverse Problems workshop, Rensselaer Polytechnic Institute, March, 2010
- “Aseismic fault slip - detecting and interpreting strain transients with geodetic data”
Department Seminar, Lehigh University, September, 2009
- “Using CUBIT with Pylith for realistic earthquake problems”
Community Finite Element Modeling workshop, Golden, Colorado, June, 2009
- “Interferometric Synthetic Aperture Radar (InSAR) in Cascadia: Lessons learned from New Orleans”
Department Seminar, Jet Propulsion Laboratory, March, 2009
- “Atmospheric, Crustal and Parameterization Errors: At what point do they significantly affect our models of moderate to large earthquakes?”
Department Seminar, University of Pennsylvania, February, 2009
Department Seminar, Lamont, February, 2009
- “Zeroing in on small-scale features in coseismic inversions: How low can (should) we go?”
AGU annual meeting, San Francisco, December, 2008
- “Atmospheric, crustal and parameterization errors: At what point do they significantly affect our models of moderate to large earthquakes?”
United States-Japan Natural Resources workshop, Seattle, October, 2008
- “Report on semi-analytic code compilation effort”
Community Finite Element Modeling workshop, Golden, Colorado, June, 2008
- “Precise earthquake locations: How might they affect disaster response?”
Center for Geohazards workshop on natural disasters, SUNY Buffalo, March 2008
- “Rapid and un-biased (or, at least, less-biased) interpretations of deformation at various scales”
Department Sem., Rosenstiel School of Marine and Atmospheric Science, March, 2008
- “Quantifying strain within the Salton Trough”
Keynote speaker, SCEC annual meeting, Palm Springs, September, 2007
- “Slow earthquakes and tectonic tremor: Potential research targets in the Andes?”
INSTOC workshop, Cornell, September, 2007
- “InSAR Reference Events: Application to earthquakes in Iran”
IUGG meeting, Perugia, Italy, July, 2007

“Generating Green’s functions with Pylith”

Community Finite Element Modeling workshop, Boulder, Colorado, June, 2007

“Aseismic events in Southern California: Detection with InSAR”

AGU joint assembly, Acapulco, Mexico, May, 2007

Academic and professional activities:

National

Southern California Earthquake Center (SCEC): NSF and USGS-sponsored community of 600+ institutions worldwide. Goal: “To develop a comprehensive understanding of earthquakes in Southern California and elsewhere, and to communicate useful knowledge for reducing earthquake risk.” Provides funding for research and collaborative activities, supports annual meeting and undergraduate summer internship program.

2020-present **Chair**, Pilot committee on Education, Diversity and Inclusion

2019-2020 **Member**, committee on harrasment/discrimination associated with the annual meeting

2018-present **At-large member**, SCEC board or directors.

2011-2016 **Chair**, Thematic Activity Group (TAG) on Transient Deformation Detection. Grown out of community exercise using synthetic data to test GPS-based detectors of anomalous fault activity into a drive to produce and test operational detectors running continuously in an online testing environment, with the goal of graduating successful algorithms to use by the USGS and similar organizations. Duties include coordination of programmers and scientists to build the operational infrastructure, review of proposals and management of the integration with the rest of SCEC goals.

2009 **Moderator**, “Science Discussion: National and international partnerships to promote earthquake system science”, SCEC annual meeting.

2008-2011 **Co-chair**, Transient Deformation Detection Exercise. Duties include the generation and distribution of synthetic GPS data to the community to identify robust methods for detecting strain transients along faults, as well as coordinating multiple online and physical workshops each year.

2008-2013 **Co-coordinator**, Simulated response from geodetic community in the case of a large earthquake in Southern California, as part of the ShakeOut project

2006-2011 **Member**, Planning committee for Southern California Earthquake Center (SCEC), with duties including proposal review, proposal writing, annual meeting planning and writing of request for proposals each year.

UNAVCO: A non-profit university-governed consortium (over 175 member institutions) facilitating geoscience research and education using geodesy. Operates and supports geodetic infrastructure, online data archives and educational materials, including training workshops, a biannual science meeting and a summer internship program dedicated to increasing the diversity of students entering the geosciences.

2016-2017 **Chair**, UNAVCO board of directors. Coordinated response to large NSF solicitation funding geodetic and seismic facilities.

2014-2015 **Vice-Chair**, UNAVCO board of directors. Establishing and overseeing policies of UNAVCO - a nonprofit that manages a repository of data and geodetic instruments that are used internationally. Budget on order of 10 million dollars a year. Current activities include response to government shutdown and budget cuts in response to sequestration, expansion of education and outreach activities and development of new funding models to supplement government support.

2014-present **Board Liason**, Geodetic Data Services. Act as liason from UNAVCO board of directors on the Geodetic Data Services working group, which archives and

- provides access to geodetic data (including campaign and real-time, high-rate GPS, satellite imagery and LiDAR data).
- 2013-2014 **Member**, 2014 UNAVCO workshop organizing committee. Organize program, invite speakers and plan field trip for 3.5 day, biannual meeting of scientists in the general field of geodesy, ~200 participants.
- 2013-2014 **Secretary**, UNAVCO board of directors. See description of Vice-Chair activities, above.
- 2013-2014 **Board Liason**, Plate Boundary Observatory working group. Act as liason from UNAVCO board of directors on the PBO working group, which manages the deployment and maintenance of 1300+ continuous GPS sites and other instrumentation across the US and abroad.
- 2010 **Panelist**, Interview for UNAVCO Education & Outreach director.

Earthscope: An NSF-funded facility aimed at exploring the North American continent with three main components in geodesy (plate boundary observatory, PBO), seismology (USArray) and the San Andreas Fault Observatory at Depth (SAFOD). Total construction budget was \$197 million, current budget is ~\$25 million/year.

- 2012-2015 **Member**, Earthscope Science Steering Committee. To foster and facilitate integrated research, education, and outreach activities and to motivate broad community participation within Earthscope, a National Science Foundation program that deploys thousands of seismic, GPS and other instruments to study the structure and evolution of the North American continent. Primary activities currently include planning for the use of the instruments and other infrastructure, much of which has now been adopted as “operational” by other groups, beyond the 2018 end of Earthscope funding.
- 2014 **Participant**, CIG-EarthScope Institute for Lithospheric Modeling Workshop. Described the requirements for modeling of the earthquake cycle, including development of use cases that included the necessary data types, level of user, and desired material/interface properties (e.g., viscoelastic, rate-state friction).
- 2010 **Member**, planning committee for Earthscope national meeting (biannual meeting, ~350 participants).

Computational Structure for Geodynamics (CIG): NSF-funded organization (currently based at UC Davis) that supports community-driven development of open-source software addressing geodynamic problems ranging from long-term growth of topography to earthquake rupture processes.

- 2014 **Nominating Committee**
- 2013-present **Institution Representative**
- 2009 **Discussion Leader**, “Opportunities and Challenges in Computational Geophysics”, Center for Infrastructure in Geodynamics workshop
- 2005-2015 **Member**, Organizing committee for the Community Finite Element Modeling Workshop. The CFEM meeting brings together groups working on short-term crustal dynamic problems including deformation during all parts of the seismic cycle and fault zone processes. Much of the work is done using publicly available codes developed through the Computational Infrastructure in Geodynamics (CIG) group.

InSAR community:

- 2017-present* **Member**, NISAR science team (NASA mission, joint with Indian Space Agency, for active radar satellite set to launch in early 2022).
- 2019-present* **Science team lead, hydrology group**, NISAR science team. In charge of designing, calibrating and validating a global soil moisture product.
- 2016-2017* **Member**, NISAR science definition team.
- 2014-present* **Member (chair in 2017-2019)**, Alaska Satellite Facility Distributed Active Archive Center (ASF-DAAC) User Working Group. Each NASA DAAC has a UWG of scientists from the field of research that the DAAC serves. They provide ongoing guidance to the DAAC regarding data holdings, system capabilities, documentation, data formats, and communications procedures which serve the needs of the scientific community.
- 2011-2012* **Vice-Chair**, Western North America Interferometric Synthetic Aperture Radar Consortium (WInSAR), duties include proposal writing and working with foreign and domestic agencies to make SAR data available to members of the consortium. Any US institution can join, and foreign members can apply for limited data access.
- 2010* **Representative** of InSAR community at Alaska SAR Facility user meeting.
- 2008-2011* **Member**, Science definition team for the proposed NASA mission DESDynI (Deformation, Ecosystem Structure and Dynamics of Ice), with duties including the characterization of science goals and instrument/mission requirements that can fulfill them. Mission has now passed the critical Mission Concept Review and is joint with the Indian Space Agency.
- 2006-2008* **Member**, Executive committee for Western North America Interferometric Synthetic Aperture Radar Consortium (WInSAR), duties include proposal writing and working with foreign and domestic agencies to make SAR data available to members of the consortium. Any US institution can join, and foreign members can apply for limited data access.
- 1998-present* **Member**, development team for the freely available Caltech/JPL SAR data processing software package ROI_PAC (<http://roipac.org>). Also includes contributions of visualization and interpretation software.

Other Activities:

- 2022-present* **Member**, NASA Earth Science Advisory Committee
- 2019* **Co-Chair/organizer**, session on new advances in seismic and geodetic data and analysis methods, SAGE/GAGE meeting, Portland, OR
- 2017-2018* **Associate Editor**, Journal of Geodesy
- 2013* **Member**, Editor in chief search, Tectonics. Solicited nominations, reviewed candidates and conducted phone interviews with the top candidates.
- 2012-2013* **Guest Editor**, Seismological Research Letters, special section on geodetic transient detection.
- 2010* **Reviewer**, National Research Council report on geodetic infrastructure.
- 2010* **Field Researcher**, Performed field work in the Imperial Valley, California, involving mapping and active seismic surveys.

- 2009 **Organizer**, Judging of outstanding student posters, geodesy section, fall AGU meeting.
- 2009-2019 **Co-Chair**, Session at fall AGU meeting (7 sessions)
- 2009-2013 **Associate Editor**, Journal of Geophysical Research – Solid Earth.
- 2009-2010 **Member**, Advisory committee for a JPL-SOPAC NASA-funded (through MEaSURES) platform for distributing models of GPS data and time series to the community.

Peer Reviewer

- **Journals:** Science; Nature Geosciences; Journal of Geophysical Research – Solid Earth; Geophysical Journal International; Geophysical Research Letters; Pure and Applied Geophysics; G-cubed; Earth and Planetary Research Letters; EOS; Radio Science; Journal of Geodesy; AGU books; student presentations at AGU meetings
- **Proposals:** National Science Foundation – Earthscope (panelist), Geophysics (panelist), Tectonics; National Aeronautics and Space Administration (panelist, 4 focus areas); USGS National Earthquake Hazards Research Program (panelist); Southern California Earthquake Center (panelist); US-Israel Binational Science Foundation, AXA research fund

- 1998-present **Member**, American Geophysical Union
- 2007-2010 **Member**, Seismological Society of America

University

- 2013,2014 **CURIE Academy field info**, College of Engineering, ~50 high school students
- 2013,2014 **Teaching Awards Committee**, College of Engineering
- 2009-2012 **Participant**, Society of Women Engineers luncheon/fair for prospective students
- 2010 **Panelist**, Cornell Days
- 2010 **Contributor**, *Landscape Stories* art installation in Arts Quad
- 2010 **Speaker**, information session responding to the Haiti Earthquake
- 2007,2010 **Small Group Facilitator**, Cornell New Student Reading Project
- 2005-2006 **Member**, Woods Hole Oceanographic Institution Postdoctoral Association Committee, organized panel discussions on proposal writing and issues with work/family balance.

Departmental

- 2017-2022 **Director**, Masters of Engineering Program
- 2017-2018 **Chair**, ad-hoc committee on building space
- 2012-2020 With Professor Allmendinger, information session on graduate school
- 2011-2017 **Member**, graduate admissions committee
- 2011-2018 **Member**, graduate awards committee
- 2008-2010 **Chair**, ad-hoc committee on graduate curriculum
- 2008 With Professor Mahowald, initiated group reading sessions on issues facing women in geoscience careers.

Outreach

- 2018 **Co-convener**, workshop on Synthetic Aperture Radar training and education, Denver, CO (25 participants from around the world, budget ~\$50K)
- 2014 **Presenter**, congressional staff during Earthscope decadal celebration in Washington, D. C.,
- 2014 **Media contact**, comments on new seismic hazard maps and significance
Associated Press (Seth Borenstein)
- 2013 **Media contact**, comments on link between earthquakes and wastewater injection
Associated Press (Malcolm Ritter)
- 2012 **Media contact**, comments on study linking earthquakes in the midwest to oil and gas drilling
Associated Press (Seth Borenstein)
- 2011 **Media contact**, about the M5.9 earthquake on Aug 22nd, 2011 in Virginia
CNN.com Q&A, 11 radio outlets, AP, Fox 5 TV New York (Cornell studio)
- 2011 **Media contact**, about the M5.6 earthquake on Nov 6th, 2011 in Oklahoma
Associated Press (Seth Borenstein)
- 2010,2011 **Interviewee**, *Science Cabaret* half-hour radio program on intersection between science and art, WICB 97.7 FM, <http://sciencecabaret.org>
- 2010 **Media contact**, about earthquakes and other natural disasters occurring in 2010.
Multiple sources, local TV, radio and newspaper

Other Presentations (presenter in bold, student or postdoc in italics, *talks)

Impact of intermittent decorrelation events on InSAR time series, with application to the Salton Trough, CA. **Lohman, R. B.** and J. Jiang. Southern California Earthquake Center Annual Meeting, Virtual, Sept., 2020.

Soil moisture variability and impact on InSAR time series: examples from hyperarid (and not-so-arid) regions and approaches for mitigation. **Lohman, R. B.** and *P. M. Burgi*, American Geophysical Union Annual Meeting, San Francisco, Dec. 2019.

Impact of forest disturbance on InSAR time series analysis, **Burgi, P. M.** and R. B. Lohman, American Geophysical Union Annual Meeting, San Francisco, Dec. 2019.

Improvements and evaluation of methods for reducing tropospheric effects in InSAR. **Murray, K. D.**, D. Bekaert, R. B. Lohman, American Geophysical Union Annual Meeting, San Francisco, Dec. 2019.

Characterizing tectonic and anthropogenic ground deformation history in the Imperial Valley, California, using Sentinel-1 InSAR time series. **Jiang, J.** * and R. B. Lohman, American Geophysical Union Annual Meeting, San Francisco, Dec. 2019.

Exploration of end-member models for inverting 1D InSAR data for 3D displacements: Application to deformation at a groundwater entrainment site in the Coachella Valley. **Murray K. D.**, R. Lohman, J. Kim, W. Holt, SAGE/GAGE workshop, Portland, OR, Oct. 2019.

Characterizing Time-Dependent Deformation Processes in Imperial Valley, California, **Jiang, J.** and R Lohman, SAGE/GAGE workshop, Portland, OR, Oct. 2019.

Comparing InSAR, microwave, and optical measurements of soil moisture in hyper-arid regions, **Burgi, P. M** and R. B. Lohman, SAGE/GAGE workshop, Portland, OR, Oct. 2019.

Soil Moisture impacts on InSAR, **Lohman, R.**, and *P. M. Burgi*, SAGE/GAGE workshop, Portland, OR, Oct. 2019.

Time-dependent deformation and seismicity in the Imperial Valley, California, **Jiang, J.** and R. B. Lohman, SCEC annual meeting, Palm Springs, CA, Sep. 2019.

SAR coherence and soil moisture variability from deep InSAR time series. **Lohman, R. B.*** and T. E. Jordan, American Geophysical Union Annual Meeting, Washington, D. C., Dec. 2018.

Constraining the postseismic deformation in a range of tectonic environments using data from the Sentinel-1a/b satellites. **Miranda O.** and R. B. Lohman, American Geophysical Union Annual Meeting, Washington, D. C., Dec. 2018.

Considerations and recommendations for working towards global and automated tropospheric corrections in InSAR. **Murray, K. D.**, and R. B. Lohman, American Geophysical Union Annual Meeting, Washington, D. C., Dec. 2018.

Soil moisture effects on InSAR time series in arid regions. **Lohman, R. G.**, T. E. Jordan, J. Jiang, Southern California Earthquake Center Annual Meeting, Palm Springs, Sept. 2018.

Recent spatiotemporal evolution of deformation in the Los Angeles Basin and southern Central Valley of California in the context of anthropogenic activity. **Murray, K. D.**, and R. B. Lohman, Southern California Earthquake Center Annual Meeting, Palm Springs, Sept. 2018.

Quantifying the bias introduced by vegetation in InSAR studies of ground deformation and surface processes, **Burgi, P. M.** and R. B. Lohman, Southern California Earthquake Center Annual Meeting, Palm Springs, Sept. 2018.

Evaluating weather reanalysis performance for the application of radar noise corrections in areas with low relief. **Murray, K. D.**, D. Bekaert, R. Lohman, UNAVCO science workshop, Denver, CO, March, 2018.

InSAR coherence study of unusual rain events in the Atacama desert, **Jordan, T. E.**, R. B. Lohman, C. P. Scott, American Geophysical Union Annual Meeting, New Orleans, LA, Dec. 2017

InSAR and GPS time series analysis in areas with large scale hydrological deformation: separating signal from noise at varying length scales in the San Joaquin Valley, **Murray, K. D.** and R. B. Lohman, American Geophysical Union Annual Meeting, New Orleans, LA, Dec. 2017

Sentinel 1a/b observations of coherence changes associated with the 2017 Hurricane season – deconvolving soil moisture changes from permanent damage, **R. B. Lohman**, American Geophysical Union Annual Meeting, New Orleans, LA, Dec. 2017

InSAR coherence time series – soil moisture as a proxy for alluvial fan age?, **Lohman, R. B.**, C. P. Scott and T. E. Jordan, Southern California Earthquake Center Annual Meeting, Palm Springs, Sept. 2017

Rupture of an Immature Fault in the Pawnee Mw5.8 earthquake, **Keranen, K. M.**, H. M. Savage, G. L. Coffey, R. B. Lohman, C. Lambert, N. Stevens, H. S. Rabinowitz, Southern California Earthquake Center Annual Meeting, Palm Springs, Sept. 2017

InSAR and GPS time series analysis in areas with large scale hydrological deformation: separating signal from noise at varying length scales in the San Joaquin Valley, **Murray, K. D.**, and R. B. Lohman, Southern California Earthquake Center Annual Meeting, Palm Springs, Sept. 2017

The effect of InSAR time series generation techniques on signals with small spatial scales, **Burgi, P.** and R. B. Lohman, Southern California Earthquake Center Annual Meeting, Palm Springs, Sept. 2017

Lohman, R. B.*, NISAR science team meeting, “Groundwater withdrawal in California”, Amherst, MA. (October, 2017).

Lohman, R. B.*, “Back to the surface – looking at subduction zones with InSAR”, CIDER summer school, Berkeley, CA, July, 2017.

Lohman, R. B.*, NISAR science definition team meeting, “The March 24-26 rain event, Chile, and Sentinel observations”, Jet Propulsion Laboratory, Pasadena, CA. (February, 2017).

Lohman, R. B.*, Cornell Energy Institute Advisory Council Meeting, “Overview of subsurface science and engineering research”, Ithaca, NY. (November, 2016).

Lohman, R. B., *Murray, K. D.*, SCEC Annual Meeting, “InSAR observations in Southern California” Southern California Earthquake Center, Palm Springs, CA. (September, 2016).

Lohman, R. B.*, NISAR science definition team meeting, “InSAR challenges in a range of terrain, land cover and signal types”, Jet Propulsion Laboratory, Pasadena, CA. (August, 2016).

Pritchard, M. E.*, R. B. Lohman, *H. E. Taylor, A. Semple, B. Valentino*, American Geophysical Union Annual Meeting, “Towards a high-resolution inventory of anthropogenic deformation in North America using InSAR”, San Francisco, CA (December, 2015)

Scott, C. P., R. B. Lohman, American Geophysical Union Annual Meeting, “Seasonal changes in soil moisture content in Northern Chile and Southern California inferred from SAR data”, San Francisco, CA. (December, 2015).

Lohman, R. B.*, Cornell Energy Institute Advisory Council Meeting, “Deformation characterization: models and methods”, Ithaca, NY. (October, 2015).

Lohman, R. B.*, Cornell Trustees Annual Council Meeting, “Space geodesy and big data”, Ithaca, NY. (October, 2015).

Scott, C. P., R. B. Lohman., SCEC Annual Meeting, “Sensitivity of earthquake source inversions to spatially variable atmospheric noise” Southern California Earthquake Center, Palm Springs, CA. (September, 2015).

Lohman, R. B.*, Presentation to NSF director, “Proving the subsurface with all earthquakes, great and small”, Boulder, CO. (February, 2015).

Lohman, R. B., *Scott, C. P.*, American Geophysical Union Fall Meeting, “Spatial scale of deformation constrained by combinations of InSAR and GPS observations in Southern California”, San Francisco, CA. (December, 2014).

Lohman, R. B.*, SCEC Community Geodetic Model (CGM) workshop, “Results of community exercise on InSAR time series”, Palm Springs, CA. (September, 2014)

Taylor, H., Charlevoix, D. J., Pritchard, M. E., Lohman, R. B., American Geophysical Union Fall Meeting, “Engaging students in geodesy: A quantitative InSAR module for undergraduate tectonics and geophysics classes,” American Geophysical Union, San Francisco, CA. (December 2013).

Scott, C. P., Lohman, R. B., American Geophysical Union Fall Meeting, “Integrating InSAR and GPS data to measure crustal deformation: Insights on resolution from sensitivity tests,” American Geophysical Union, San Francisco, CA. (December 2013).

Taylor, H.*, Pritchard, M. E., Lohman, R. B., American Geophysical Union Fall Meeting, “Recent Changes in Ground Deformation at the East Mesa Geothermal Field, California as Measured by InSAR,” American Geophysical Union, San Francisco, CA. (December 2013).

Prush, V. B., Lohman, R. B., American Geophysical Union Fall Meeting, “Anthropogenic Elevation Change in the Pacific Northwest,” American Geophysical Union, San Francisco, CA. (December 2013).

Delgado, F., Pritchard, M. E., Lohman, R. B., American Geophysical Union Fall Meeting, “The 2011 Cerro Hudson volcano eruption (Southern Andes, Chile): Pre-eruptive inflation and hot spots observed with InSAR and thermal imagery,” American Geophysical Union, San Francisco, CA. (December 2013).

Scott, C. P., Lohman, R. B., SCEC Annual Meeting, “Integrating InSAR and GPS data to measure crustal deformation: Insights on resolution from sensitivity tests,” Southern California Earthquake Center, Palm Springs, CA. (September, 2013).

Lohman, R. B.*, SCEC Annual Meeting Geodesy Section, “Report on progress of community InSAR time series validation exercise,” Southern California Earthquake Center, Palm Springs, CA. (September, 2013).

Lohman, R. B.*, SCEC Community Geodetic Model (CGM) Workshop, "Combined software tools," SCEC, Menlo Park, CA. (May 31, 2013).

Lohman, R. B.*, SCEC Community Geodetic Model (CGM) Workshop, "InSAR time series analysis techniques overview," SCEC, Menlo Park, CA. (May 31, 2013).

Lohman, R. B.*, SCEC Community Geodetic Model (CGM) Workshop, "CGM as a time dependent reference frame for transient detection," SCEC, Menlo Park, CA. (May 30, 2013).

Prush, V. B.*, Lohman, R. B., American Geophysical Union Fall Meeting, "A method for constraining canopy height using single-polarization L-band Interferometric Synthetic Aperture Radar (InSAR)," American Geophysical Union, San Francisco, CA. (December 2012).

Blom, R. G.*, Chapman, B. D., Deese, R., Dokka, R. K., Fielding, E. J., Hawkins, B., Hensley, S., Ivins, E. R., Jones, C. E., Kent, J. D., Liu, Z., Lohman, R. B., Zheng, Y., American Geophysical Union Fall Meeting, “Gulf Coast Subsidence: Integration of Geodesy, Geophysical Modeling, and Interferometric Synthetic Aperture Radar Observations,” American Geophysical Union, San Francisco, CA. (December 2012).

Brown, L. D., Davenport, K. K., Quiros, D. A., Hole, J. A., Han, L., Horowitz, F. G., Chen, C., Mooney, W. D., Barnhart, W. D., Lohman, R. B., Bastien, P., Fennig, N., Ferguson, A., American Geophysical Union Fall Meeting, "Aftershock Imaging with Dense Arrays (AIDA): Results and lessons learned from the dense deployment of EarthScope portable instruments following the August 23, 2011, Mw 5.8, Virginia Earthquake," American Geophysical Union, San Francisco, CA. (December 2012).

Scott, C. P., Lohman, R. B., American Geophysical Union Fall Meeting, "Comparing the InSAR observations for Andean retroarc earthquakes triggered by the Mw 8.8 Maule earthquake with seismic fault plane solutions and geologic constraints," American Geophysical Union, San Francisco, CA. (December 2012).

Barnhart, W. D., Lohman, R. B., American Geophysical Union Fall Meeting, "InSAR Time Series Noise Characterization and Mitigation with MODIS," American Geophysical Union, San Francisco, CA. (December 2012).

Barnhart, W. D., Lohman, R. B., American Geophysical Union Fall Meeting, "Phantom Earthquakes: Remotely driving aseismic fold growth with basement earthquakes," American Geophysical Union, San Francisco, CA. (December 2012).

Barnhart, W. D., Lohman, R. B., SCEC Annual Meeting, "InSAR Time Series Noise Characterization and Mitigation with MODIS," Southern California Earthquake Center, Palm Springs. (September 2012).

Lohman, R. B.*, SCEC annual meeting, "Tectonic Geodesy working group," Southern California Earthquake Center, Palm Springs, CA. (September 2012).

Lohman, R. B.*, Community Finite Element Modeling workshop, "Geodetic Source Inversion Validation," SCEC, NSF, NASA, Golden, Colorado. (June 2012).

McGuire, J. J., Catchings, R. S., Lohman, R. B., Rymer, M. J., Goldman, M. R., Seismological Society of America Annual Meeting, "The Obsidian Creep Project: Active and Passive Source Imaging of Faults in the Brawley Seismic Zone and Salton Sea Geothermal Field, Imperial County, California," Seismological Society of America, San Diego, CA. (April 2012).

Brown, L. D., Davenport, K., Quiros, D. A., Han, L., Chen, C., Hole, J. A., Lohman, R. B., Ferguson, A. J., Fennig, N., Barnhart, W., Bastien, P., Mooney, W. D., Pritchard, M. E., American Geophysical Union Fall Meeting, "Aftershock Imaging with Dense Arrays (AIDA) following the August 23, 2011, Mw 5.8, Virginia Earthquake: Feasibility Demonstration and Preliminary Results," American Geophysical Union, San Francisco, CA. (December 2011).

Prush, V., Lohman, R. B., American Geophysical Union Fall Meeting, "An investigation of observed phase differences between clearcut and standing forests in interferograms from the Pacific Northwest," American Geophysical Union, San Francisco, CA. (December 2011).

Hole, J. A., Davenport, K., Han, L., Chapman, M. C., Quiros, D. A., Chen, C., Brown, L. D., Lohman, R. B., Ferguson, A. J., Fennig, N., Mooney, W. D., American Geophysical Union Fall Meeting, "Dense array recordings of the central Virginia earthquake aftershock sequence: A prototype for Flexi-RAMP," American Geophysical Union, San Francisco, CA. (December 2011).

Blom, R. G., Dokka, R. K., Fielding, E. J., Hawkins, B. P., Hensley, S., Ivins, E. R., Jones, C. E., Lohman, R. B., Zheng, Y., American Geophysical Union Fall Meeting, "Gulf Coast Subsidence: Crustal Loading, Geodesy, and Recent InSAR and UAVSAR Observations," American Geophysical Union, San Francisco, CA. (December 2011).

Goldman, M. Catchings, R., Rymer, M., Lohman, R. B., McGuire, J., Sickler, R., Criley, C., Rosa, C., American Geophysical Union Fall Meeting, "High Resolution Seismic Imaging of the Brawley Seismic Fault Zone," American Geophysical Union, San Francisco, CA. (December 2011).

Barnhart, W. D., Willis, M. J. , Lohman, R. B. , Melkonian, A. K. , American Geophysical Union Fall Meeting, "High-Resolution (0.5m) Optical Imagery and InSAR for Constraining Earthquake Slip: The 2010-2011 Canterbury, New Zealand Earthquakes," American Geophysical Union, San Francisco, CA. (December 2011).

Williams, C. A., Wallace, L. M., Beavan, R. J., Lohman, R. B., Ellis, S. M., Marson-Pidgeon, K., Eberhart-Phillips, D. M., Reyners, M., Henrys, S. A., Bell, R. E., American Geophysical Union Fall Meeting, "Modeling of Slow Slip Events at the Hikurangi Subduction Margin," American Geophysical Union, San Francisco, CA. (December 2011).

Barnhart, W. D.*, Lohman, R. B. , American Geophysical Union Fall Meeting, "Orogen-Wide InSAR Time Series for Detecting Deformation Sources: The Zagros and Makran of Southern Iran," American Geophysical Union, San Francisco, CA. (December 2011).

Nee, P., Lohman, R. B., American Geophysical Union Fall Meeting, "Some insights into fault inversion resolution using real and synthetic geodetic data," American Geophysical Union, San Francisco, CA. (December 2011).

Lohman, R. B.*, GIS day, "The next generation of NASA missions," Cornell, Ithaca, NY. (November 2011).

Pritchard, M.*, Lohman, R. B., Science Workshop for Eastern North America, Earthscope/GeoPRISMS, Lehigh University, PA. (October 2011).

Barnhart, W. D., Lohman, R. B., American Geophysical Union Fall Meeting, "Identifying Growth of Structures in the Zagros Fold and Thrust Belt: Initial Time Series Results and Evaluation of Precipitable Water Vapor Effects," American Geophysical Union, San Francisco, CA. (December 2010).

Barnhart, W. D.*, Lohman, R. B., American Geophysical Union Fall Meeting, "Mastering Slip Distributions by Minimizing Model Parameterization Errors: A Case Study with the 2010 Sierra El Mayor, Mexico Earthquake," American Geophysical Union, San Francisco, CA. (December 2010).

Catchings, R. D., Rymer, M. J., Goldman, M., Lohman, R. B., McGuire, J. J., American Geophysical Union Fall Meeting, "The Obsidian Creep Project: Seismic Imaging in the Brawley Seismic Zone and Salton Sea Geothermal Field, Imperial County, California," American Geophysical Union, San Francisco, CA. (December 2010).

Barnhart, W. D., Lohman, R. B., SCEC Annual Meeting, "Identifying Growth of Structures in the Zagros Fold and Thrust Belt: Initial Time Series Results and Evaluation of Precipitable Water Vapor Effects," Southern California Earthquake Center, Palm Springs, CA. (September 2010).

Huth, A., Lohman, R. B., Barnhart, W. D., SCEC Annual Meeting, "InSAR Time Series in a Fold and Thrust Belt," Southern California Earthquake Center, Palm Springs, CA. (September 2010).

Lohman, R. B., SCEC Annual Meeting, "InSAR/GPS Combination in Time Series Analysis," Southern California Earthquake Center, Palm Springs, CA (September 2010).

Barnhart, W. D., Lohman, R. B., American Geophysical Union Annual Fall Meeting, "Automated Fault Discretization for use in Inversions of Coseismic Deformation from Geodetic Observations," American Geophysical Union, San Francisco, CA. (December, 2009).

Ivins, E. R.*, Blom, R. G., Dokka, R. K., Lohman, R. B., Klemann, V., Fielding, E. J., American Geophysical Union Annual Fall Meeting, "Theory and Observation of Postglacial Sediment - Ocean Loading and Geoid Variability: Application to Subsidence in the Gulf of Mexico and other River Delta Systems and Enclosed Basins," American Geophysical Union, San Francisco, CA. (December, 2009).

Blom, R. G., Chapman, B., Dokka, R. K., Fielding, E. J., Hensley, S., Ivins, E. R., Lohman, R. B., American Geophysical Union Annual Fall Meeting, "Hazards of Gulf Coast Subsidence: Crustal Loading, Geodesy, InSAR and UAVSAR Observations," American Geophysical Union, San Francisco, CA. (December, 2009).

Holtkamp, S. G.*, Pritchard, M. E., Lohman, R. B., Brudzinski, M. R., American Geophysical Union Annual Fall Meeting, "An Earthquake Swarm Search Implemented at Major Convergent Margins to Test for Associated Aseismic Slip" American Geophysical Union, San Francisco, CA. (December, 2009).

Barnhart, W. Lohman, R. B., SCEC Annual Meeting, "Model Resolution-Based Fault Discretization for Earthquake Slip Inversions," Southern California Earthquake Center, Palm Springs, CA. (September 2009).

Lohman, R. B., Murray-Moraleda, J., Agnew, D., SCEC Annual Meeting, "Transient Detection Workshop Results: Phase II," Southern California Earthquake Center, Palm Springs, CA. (September 2009).

Barnhart, W. D., Lohman, R. B., American Geophysical Union Joint Assembly, "Modeling Coulomb Stress Changes Associated With the 2005 and 2008 Qeshm Island, Iran Thrust Earthquakes Through InSAR Inversions", American Geophysical Union, Toronto, Canada. (May 2009).

Pritchard, M. E.*, Lohman, R. B., Fournier, T. J., Holtkamp, S., American Geophysical Union Joint Assembly, "Measuring surface deformation in subduction zones with InSAR: Examples from South America and Cascadia", American Geophysical Union, Toronto, Canada. (May 2009).

Riddick, S. N., Pritchard, M. E., Barnhart, W. D., Lohman, R. B., American Geophysical Union Fall Meeting, "Comparing C and L Band InSAR Observations of Volcanic Deformation in South America," American Geophysical Union, San Francisco, CA. (December 2008).

Holtkamp, S., Pritchard, M. E., Lohman, R. B., Steinberg, L., American Geophysical Union Fall Meeting, "Searching for Displacement Associated with Cascadia Slow Slip Events with InSAR," American Geophysical Union, San Francisco, CA. (December 2008).

Williams, N. R., Lohman, R. B., SCEC Annual Meeting, "Modeling Sensitivity of GPS Networks to Ground Deformation in Southern California," Southern California Earthquake Center, Palm Springs, CA. (September 2008).

Steinberg, L., Lohman, R. B., SCEC Annual Meeting, "InSAR and Time Series Investigations in Cascadia," Southern California Earthquake Center, Palm Springs, CA. (September 2008).

Crowell, B. W., Bock, Y., Sandwell, D., Fialko, Y., Lohman, R. B., SCEC Annual Meeting, "Near Real-Time Processing of Results from the 2008 Imperial Valley, California, GPS Survey," Southern California Earthquake Center, Palm Springs, CA. (September 2008).

Lohman, R. B.* Community Finite Element Modeling Workshop, "Introduction to CUBIT: A quick tutorial and some simple examples," Center for Infrastructure in Geodynamics, Golden, CO. (June 2008).

Lohman, R. B., Fielding, E. J., Blom, R. G., American Geophysical Union Fall Meeting, "Application of Persistent Scatterer Radar Interferometry to the New Orleans Delta Region," American Geophysical Union, San Francisco, CA. (December 2007).

Finnegan, N. J.*, Pritchard, M. E., Lohman, R. B., Lundgren, P., American Geophysical Union Fall Meeting, "Measuring Vertical Deformation in the Seattle, WA, Urban Corridor with Satellite Radar Interferometry Time Series Analysis," American Geophysical Union, San Francisco, CA. (December 2007)

Owen, S. E.*, Dong, D., Lohman, R. B., Liu, Z., Hetland, E. A., Muse, P., Lundgren, P., Webb, F., Simons, M., American Geophysical Union Joint Assembly, "Multi-spatial and Temporal Scale Deformation of Japan from GEONET Data," American Geophysical Union, Acapulco, Mexico. (May 2007).

Roland, E., Lohman, R. B., McGuire, J. J., Seismological Society of America Annual Meeting, "Does Aseismic Creep Trigger Migrating Earthquake Swarms?," Seismological Society of America, Hawaii. (April 2007).

Lohman, R. B., American Geophysical Union Fall Meeting, "Sensitivity of Inversions for Fault Slip and Geometry to Lateral Variations in Elastic Structure," American Geophysical Union, San Francisco, CA. (December 2006).

Lohman, R. B., SCEC Annual Meeting, "Sensitivity of Fault Parameter Inversions to Elastic Structure," Southern California Earthquake Center, Palm Springs, CA. (September 2006).

Roland, E., McGuire, J., Lohman, R., SCEC Annual Meeting, "Migrating Seismic Swarms as an Indication of Aseismic Creep in the Salton Trough," Southern California Earthquake Center, Palm Springs, CA. (September 2006).

Lohman, R. B., McGuire, J., Seismological Society of America Annual Meeting, "Aseismic Creep Associated with Seismic Swarms in the Salton Trough, CA," Seismological Society of America, San Francisco, CA. (April 2006)

Lohman, R. B.*, American Geophysical Union Fall Meeting, "InSAR-Derived Constraints on Earthquakes: What can we learn, and how well can we know it?," American Geophysical Union, San Francisco, CA. (December 2005).

Lohman, R. B., McGuire, J., American Geophysical Union Fall Meeting, "Deformation and Seismicity Within the Salton Trough," American Geophysical Union, San Francisco, CA. (December 2005).

Simons, M.*, Ji, C., Lohman, R. B., Pritchard, M. E., Song, T. A., Webb, F., American Geophysical Union Fall Meeting, "Testing Predictions of Along-Strike Variations in the Shallow Seismogenic Behavior of Subduction Zones," American Geophysical Union, San Francisco, CA. (December 2004).

Lohman, R. B., Simons, M., American Geophysical Union Fall Meeting, "Compactness vs. Smoothness: Methods for Regularizing Fault Slip Inversions with Application to Subduction Zone Earthquakes," American Geophysical Union, San Francisco, CA. (December 2004).

Saikia, C. K., Ichinose, G., Lohman, R., Simons, M., Rosen, P., Seismological Society of America Annual Meeting, "Locations of Small Magnitude ($M_w < 5$) Iranian Earthquakes using a Synergy between InSAR and Seismic Methods," Seismological Society of America, Palm Springs, CA. (April, 2004).

Lohman, R. B., Simons, M., Pritchard, M. E., American Geophysical Union Fall Meeting, "Seven Big Strike-Slip Earthquakes," American Geophysical Union, San Francisco, CA. (December 2003).

Lohman, R. B., Simons, M., American Geophysical Union Fall Meeting, "InSAR-Constrained Locations of Earthquakes in the Zagros Mountains of Iran," American Geophysical Union, San Francisco, CA. (December 2002).

Simons, M.*, Lohman, R. B., Ji, C., Helmberger, D. V., American Geophysical Union Fall Meeting, "Earthquakes Great and Small: The Synergy Between Geodesy and Seismology American Geophysical Union, San Francisco, CA. (December 2002).

Saikia, C. K., Ichinose, G., Simons, M., Lohman, R. B., Ji, C., Helmberger, D. V., American Geophysical Union Spring Meeting, "InSAR and Seismically-Located Earthquakes," American Geophysical Union, Washington, D. C. (May 2002)

Lohman, R. B., Simons, M., American Geophysical Union Fall Meeting, "The May 10, 1997 Ardekul (Zirkuh) Earthquake in Iran: Crustal Deformation Constrained by Interferometric Synthetic Aperture Radar and Inversions for Fault Slip, Geometry, and Elastic Parameters," American Geophysical Union, San Francisco, CA. (December 2001).

Lohman, R. B., Simons, M., American Geophysical Union Fall Meeting, "Interferometric Synthetic Aperture Radar Imagery of the June 29, 1992, Little Skull Mountain Earthquake," American Geophysical Union, San Francisco, CA. (December 2000).