



AN NSF+USGS CENTER

Southern California Earthquake Center

SCEC5 Final Technical Report

Reporting Period: Feb 1, 2017 - Jan 31, 2022

USGS Award G17AC00047

Southern California Earthquake Center: Research Program in Earthquake
System Science, 2017-2022

Principal Investigator: Yehuda Ben-Zion

University of Southern California

benzion@usc.edu | 213-740-6734

Co-Principal Investigator: Gregory C. Beroza

Stanford University

beroza@stanford.edu | 650-723-4958

Abstract

The Southern California Earthquake Center (SCEC) has been conducting and coordinating fundamental and applied research on earthquakes that aims to be global in impact while using Southern California as its natural laboratory. SCEC advances earthquake system science by gathering information from field observations and lab experiments; conducting theoretical studies and numerical simulations; synthesizing knowledge in community models and products of system-level physics-based modeling; and communicating understanding of seismic hazards to reduce risk and promote resilience. The Center has been operating under its fifth 5-year cooperative agreements (SCEC5) with the USGS (from 1 Feb 2017 to 31 Jan 2022) and the NSF (from 1 May 2017 to 30 Apr 2022). This report summarizes research achievements, and Communications, Education and Outreach (CEO) activities during the SCEC5 funding period. The research led to hundreds of peer-reviewed publications and launched the careers of many young scientists. The CEO program has engaged millions of people annually in earthquake preparedness activities during SCEC5.

The Science Plan of SCEC5 comprises 14 topical elements, organized into four broad themes. The validation of model-based predictions against data has been a key SCEC activity, because empirical testing is the most powerful guide for assessing model uncertainties and moving models towards better representations of reality. SCEC validation efforts couple basic earthquake research to the practical needs of probabilistic seismic hazard analysis, operational earthquake forecasting, and rapid earthquake response. Risk reduction requires actions motivated by useful information and strongly couples SCEC science to earthquake engineering. Collaborations with engineers are directed towards physics-based modeling capabilities that span system processes from “ruptures-to-rafters.” SCEC5 efforts on verification, validation, and integration of research results into impactful computational products utilized large-scale earthquake system science research through high-performance computing (HPC) implementations of various frameworks, such as the Broadband platform, CyberShake, OpenSHA, RSQSim, and several dynamic rupture and wave propagation codes.

The 2019 Ridgecrest earthquake sequence generated rich datasets gathered in a rapid scientific response through a coordinated effort by SCEC, USGS, CGS and other organizations involving field studies, seismic and geodetic instrument deployments, and remote sensing and imaging surveys. The data sets have led to novel technique developments and results. Examples include detailed post-seismic transients and slip inversions from space geodetic data, multi-scale seismic velocity models, documentation of regional changes of subsurface seismic velocities following the Ridgecrest mainshock, and information on earthquake source properties before, during and after the Ridgecrest sequence. Additional highlights include advances to multiple SCEC community models, with an open community evaluation of the community fault model model CFM5.3, broader use of artificial intelligence techniques, high resolution results on properties of subsurface materials, improved understanding of stress, validation of fault displacement from dynamic rupture simulations, adding effects of topography and nonlinear response of shallow materials to ground motion simulations, and progress toward goals of technical activity groups, including notably a new technical activity group on community validation of earthquake stress drops.

The CEO program of SCEC5 conducted a range of activities aiming to improve the application of earthquake science in policy and practice; reduce the loss of life, property, and recovery time; increase science literacy; and increase diversity, retention, and career success in the scientific workforce. Examples include the Great ShakeOut Earthquake Drills that transitioned to an online mode during the pandemic, new community engagement webinars during the pandemic, 12 new or updated documents of the *Earthquake Country Alliance*, and fostering workforce development through undergraduate Internship Programs and Transitions Program.

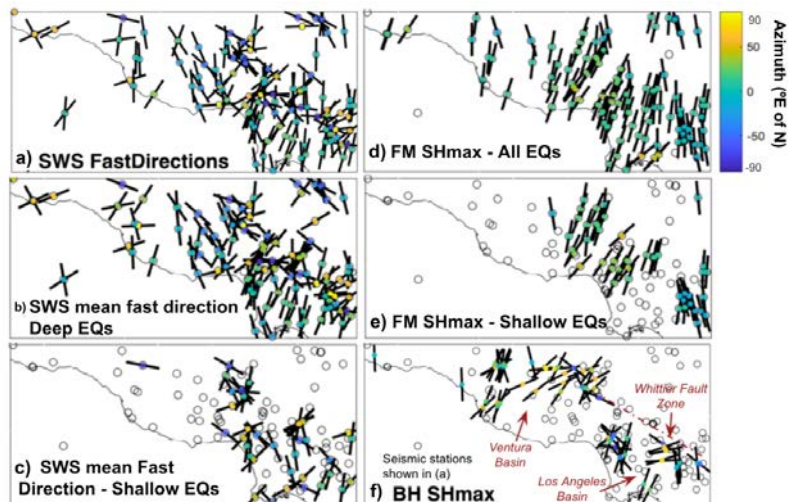
2. Research Accomplishments

Earthquake system science is inherently multi-disciplinary and SCEC serves as a community platform where scientists and engineers from a broad spectrum of disciplines converge to tackle key problems that require their combined expertise. The convening capability of SCEC across all relevant disciplines of earthquake science makes the whole greater than what might result from funding individual PI research in the absence of a center. In addition to individual collaborations, clear examples of coordinated research arising from centralized coordination include the Community Models, Technical Activity Groups and Special Fault Study Areas as described below.

The SCEC5 collaboration is organized around four main themes comprising 14 thematic elements that we use to frame and to summarize research accomplishments. We document progress towards fulfilling year-5 milestones, which account for the limitations on research activities caused by the COVID-19 pandemic. The pandemic had a particular impact on both geological and geophysical work on the Cajon Pass Earthquake Gate.

Theme A. Modeling the Fault System

1. SDOT: Stress and Deformation Over Time. The community stress model was improved through SCEC5 by adding borehole stress measurements. The most recent contributions include the Wilmington Blind Thrust where it comes ashore near Long Beach (Kain and Persaud, 2019) and the Santa Barbara Channel (Persaud et al., 2020). Both are potential sites of large reverse-faulting earthquakes. For the Santa Barbara Channel, there are differences in the orientation relative to previous stress measurements. Borehole stress measurements show greater heterogeneity than those for regional focal mechanism stress inversions, which represent stress at seismogenic depth. Persaud et al. (2020) argue that the difference also reflects the fact that borehole measurements resolve stress at a much finer spatial scale, and the likely situation that stress is more heterogeneous in the shallow crust. The depth-dependence of the heterogeneity spectrum should inform efforts to build the CSM and to



use the CSM for purposes such as dynamic rupture modeling. Liu et al. (2022) used multi-cycle modeling, and the changing distribution of slip that it entails, to interpret the paleoseismic record of events on the Big Bend of the San Andreas Fault. Their modeling indicated five rupture patterns across this complexity, four of which are consistent with observations of event sizes in the paleoseismic record. Shear wave splitting measurements show greater variability than borehole strainmeter measurements (Fig.

1), particularly in the vicinity of active faults (Luttrell and Hardebeck, 2021)

Figure 1. Estimates of crustal strain directions vary with the method used. (a-c) Shear wave splitting, from Li and Peng (2017). (d-e) Focal mechanism inversions, and (f) borehole breakout directions from Luttrell and Hardebeck (2021).

The Community Geodetic Model represents the “D” in SDOT and exploits the combined strengths of GNSS and InSAR to study crustal deformation over a wide range of distances and times. Combining them requires first reducing measurement errors to the extent possible and then quantifying errors that remain. As part of that effort, Funning et al. (2022) produced Sentinel-1 InSAR velocity maps covering the entire state of California using over 2000 interferograms from the ARIA project that span 9 tracks. These results were validated against GNSS velocity data to test the effectiveness of tropospheric corrections and to document deformation features apparent in the data, including subsidence of the San Joaquin Valley and shallow creep on the central San Andreas (Fig. 2). Further analysis validated the rate of deformation on the creeping section against GNSS data.

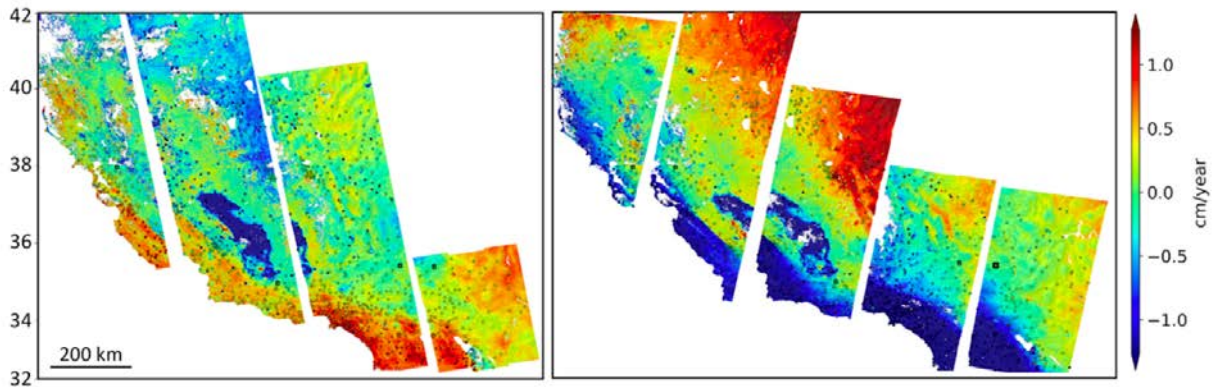
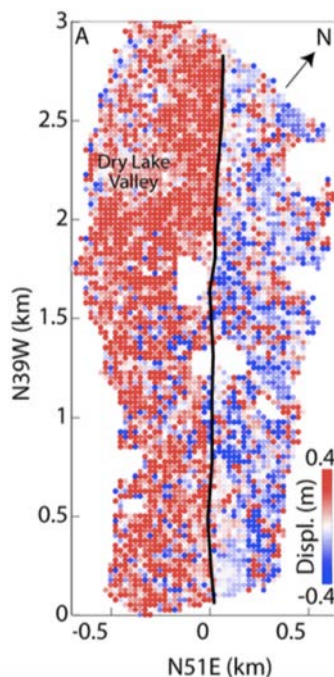


Figure 2. Troposphere-corrected InSAR line-of-sight displacement for ascending (left) and descending (right) tracks of Sentinel 1. Velocities referenced to a single GNSS station (black square) for each; GNSS stations used for velocity validation are marked with black dots. Sentinel-1 tracks overlap by about 25% with different tracks shown separately. Positive indicates motion towards the satellite. The extensive negative velocity feature in the central tracks reflects San Joaquin Valley subsidence due to groundwater extraction. (after Funning et al., 2022).



Scott et al. (2020) used differential lidar topography (11–13 year time span) to measure a spatially dense surface deformation field along a 150 km section of the Central San Andreas and Calaveras Faults (Fig. 3.)

Figure 3. Fault offset derived from the topographic differencing of the 2007 EarthScope Northern California airborne lidar and 2017 UAS structure-from-motion topography at the Dry Lake Valley paleoseismic site (36.468, -121.055) along the creeping portion of the central San Andreas Fault. Comparing surface displacements on either side of the fault indicates a creep rate of 2.5 ± 0.2 cm/yr (Scott et al., 2020).

2. Special Fault Study Areas: Focus on Earthquake Gates. Progress on the Cajon Pass Earthquake Gate was impacted by the pandemic. SCEC held a virtual workshop on Cajon Pass, in which paleoseismic work (Figueiredo and Kerr, 2020) revealed that Lytle Ridge Creek Fault likely reflects ruptures that jump from the San Andreas Fault to the San Jacinto Fault. Rodriguez-Padilla et al. (2021) showed that the Lytle Creek Ridge Fault fails in extension only in scenarios where joint San

Andreas-San Jacinto ruptures produce strong local extension in an overall compressional environment, but not when only one of those faults ruptures. Joint rupture occurs for about 20-25% of cases, which amounts to three times in the past ~2000 years - most recently in 1812. Schärer and Yule (2020) developed a new and more comprehensive model of ruptures on the southern San Andreas Fault (Fig. 4), which was designed to produce the fewest (and hence largest) ruptures permissible given the available paleoseismic data. The assembled evidence supports the notion that Cajon Pass acts as an earthquake gate, i.e., a region of fault complexity that may inhibit propagating rupture depending on fault geometry, material properties, distributed deformation, and earthquake history.

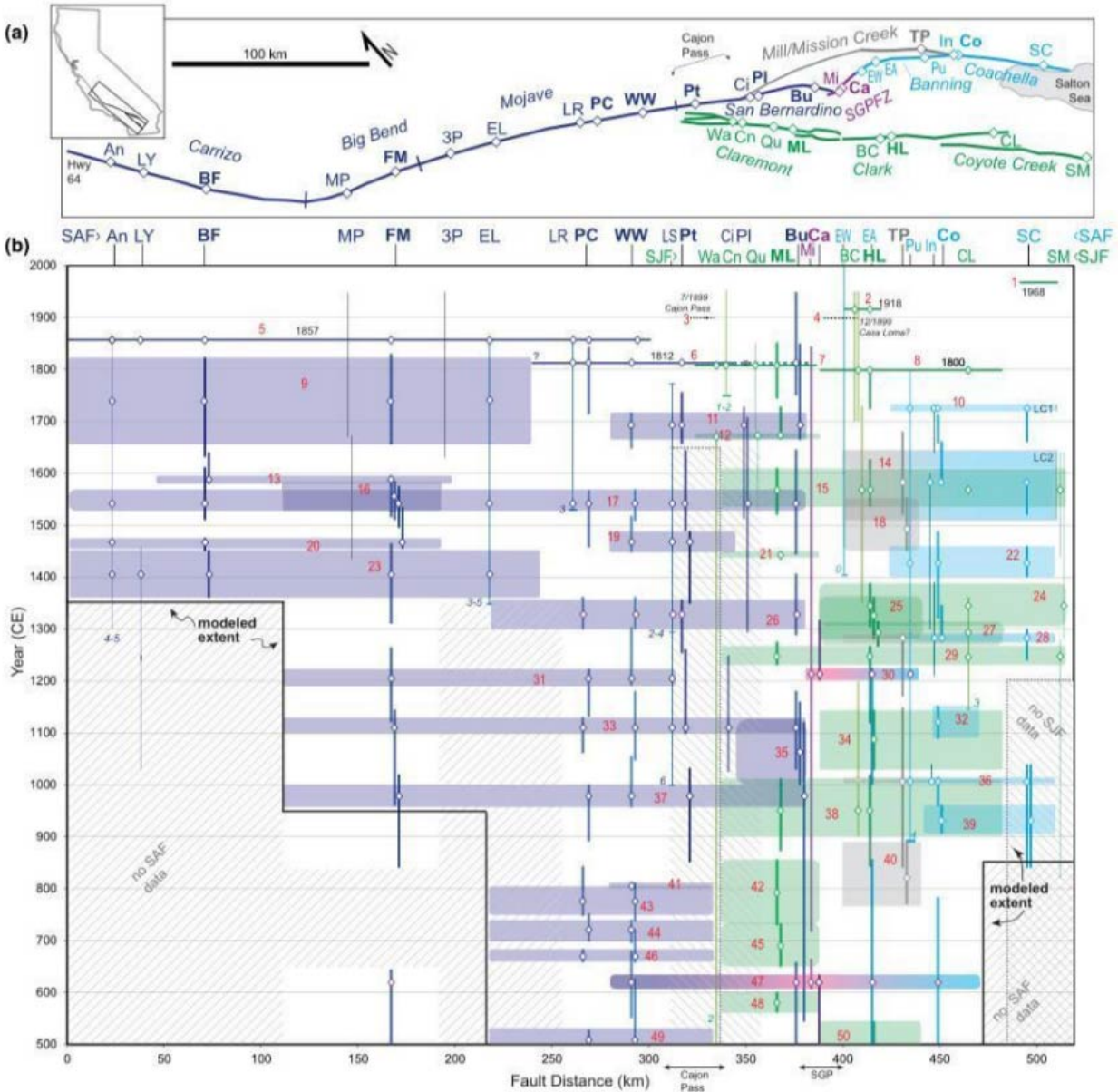


Figure 4. Maximum rupture model for the San Andreas Fault (dark and light blues), San Jacinto Fault (green), San Gorgonio Pass Fault Zone (purple), and Mill/Mission Creek Fault (gray) (Schärer and Yule, 2020). Under this assumption, some events terminate at Cajon Pass, while others do not.

3. Community Models. Community Models (CXMs) are a unique shared cyberinfrastructure that encode accumulated knowledge about the Southern California natural laboratory. Community Models describe cumulative consensus knowledge about key features of the crust and upper mantle, including: fault geometry (Community Fault Model, CFM), elastic and attenuation properties (Community Velocity Model, CVM), deformation rate (Community Geodetic Model, CGM), rheology (Community Rheology Model, CRM), temperature (Community Thermal Model, CTM), stress and stressing rate (Community Stress Model, CSM), and the Unified Community Velocity Model (UCVM) software framework that provides access to detailed information about Earth properties on regional scales for use by Earth scientists, earthquake engineers, computational scientists, and others (Fig. 5) to simulate earthquake phenomena. A set of consensus CXMs (Fig. 5) were developed over the last three decades by SCEC focusing on southern California. The original CXMs were structural representations of seismic velocities (CVM) and active faults (CFM) combined into a Unified Structural Representation (USR). Later efforts developed community geodetic and stress models to represent kinematic (CGM) and dynamic (CSM) states of the system, augmented in the last few years by thermal (CTM) and rheological models (CRM).

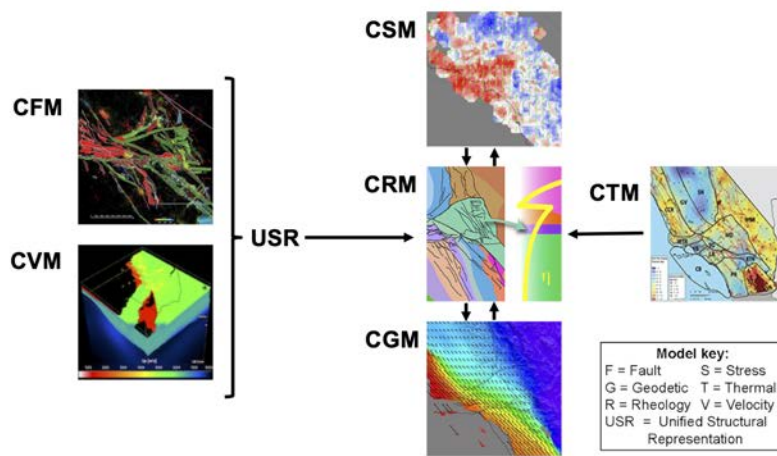


Figure 5. Schematic illustration of the SCEC community models. The arrows depict the flow of information between models and how that informs their dependencies. The CRM, for example, is informed by the Community Thermal Model due to the dependence of rheology on temperature. The CVM and CFM also inform the CRM through material properties and shear zones respectively. The CGM

and CSM inform, and are informed by, the rheological response of the crust and upper mantle.

There has been steady progress on all community models. During 2021 we completed the review and release of version 5.3 of the SCEC Community Fault Model (CFM5.3.2) was released in January, 2022 (Fig. 6). CFM faults are defined based on mapped surface traces, seismicity, reflection profiles, well/borehole data, and geologic cross sections. It includes new and updated fault models including representations of the faults responsible for the 2019 M 6.4 and M 7.1 Ridgecrest earthquakes, major updates in limited locations, and alternative fault representations. Several new added features make the SCEC CFM even more accessible to the earthquake community. These include: a map-based web interface, a 3D web interface, and improvements to metadata. CFM5.3 underwent an open community evaluation in the Fall, 2021. Results from this evaluation will provide key information towards the next release of the SCEC Community Fault Model. The question of how to update the CVM(s) given multiple and multi-scale constraints on velocity models is a key to SCEC's continuing efforts in ground motion prediction, and we report on progress below.

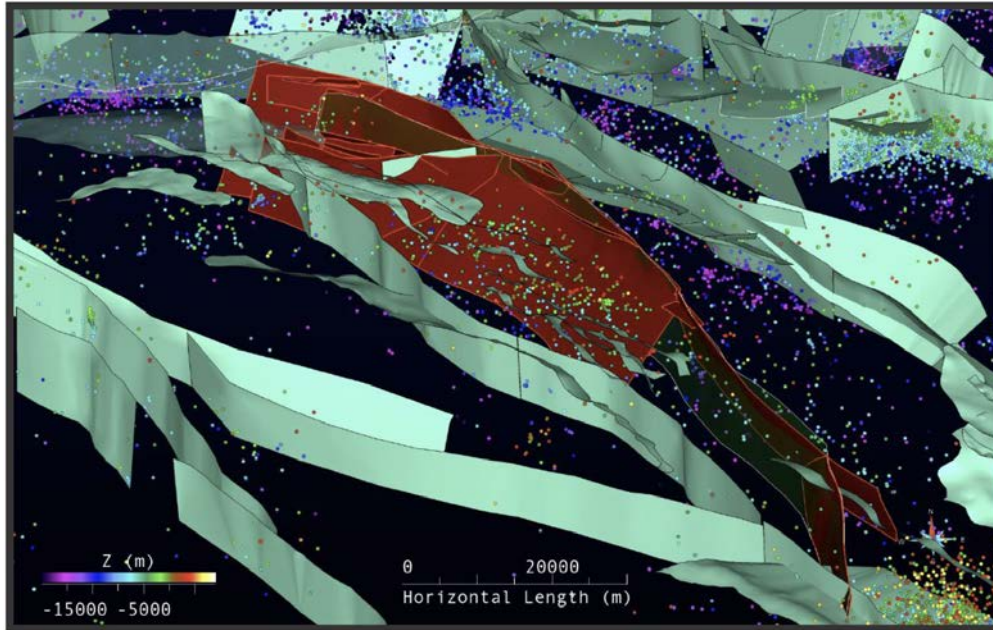


Figure 6. Perspective view of a new fault model of the Palos Verdes fault zone in the Los Angeles basin shown as red surfaces (Wolfe et al., 2021).

The CRM describes 3D ductile rheology of the southern California lithosphere based on seismic, geologic, and experimental rock deformation studies. It has been improved iteratively through community input, including five workshops from 2015-2019, and comprises two components: a 3D Geological Framework Model GFM of southern California’s crust, and a set of ductile flow laws for each lithology. The GFM includes 23 provinces with a layered lithology that includes the spatial and depth extent of rock types. These are coupled with mineral flow laws, a description of mixing laws and assumptions, and synthetic whole-rock flow laws for each lithology, as well as codes for calculating effective viscosity profiles. The flow laws are analytical expressions that enable quick and accurate calculations of effective viscosity and differential stress to provide a model for southern California’s ductile rheology.

4. Data-Intensive Computing. To facilitate data-intensive computing on seismic network data, the Southern California Earthquake Data Center (SCEDC) added to its Amazon Open Data Set its cloud archive: the earthquake catalog, phase picks, and event-based waveform data. Tutorials on how to use it are available at: <https://scedc.caltech.edu/data/cloud.html>, as are scripts to help users access the archive on GitHub at: <https://github.com/SCEDC/cloud>. Over 90 Terabytes of SCEDC waveform data was distributed to users from this dataset in 2020. Fig. 7 indicates that cloud services are effectively fulfilling the largest requests.

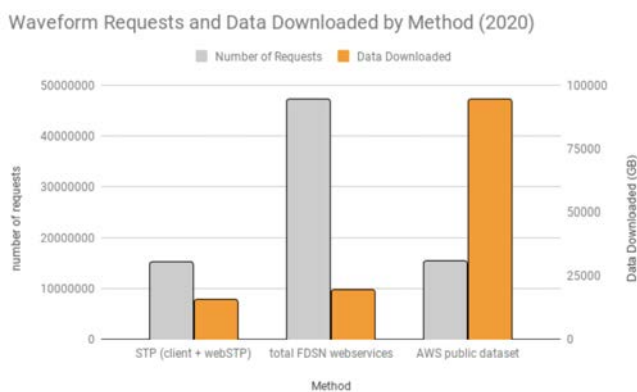


Figure 7. Access to the SCEDC waveform requests by method. By number the most requests to the SCEDC are through FDSN web services (middle pair of bars); however, by size of data served, most was distributed through AWS (right pair of bars).

Mining Seismic Wavefields began with seed funding from SCEC to develop data-mining techniques for waveform-similarity search to uncover small earthquakes in continuous data. It evolved into an NSF Geoinformatics project, and from that emerged the QTM earthquake catalog for Southern California that increased cataloged seismicity by over an order of magnitude (Ross et al., 2019). The unprecedented detail revealed how seismicity of the enigmatic Cahuilla swarm (Fig. 5) can be understood through pore-fluid migration (Ross et al., 2020). Mining seismic wavefields led to development of machine-learning-based techniques for earthquake monitoring that are being applied in diverse tectonic settings around the world.

During SCEC5 we broadened the use of deep learning from seismology to other aspects of earthquake science. Chen et al. (2020) used structure from motion and deep learning on aerial imagery to estimate rock traits along a tectonic fault scarp. Those properties derive from initial volcanic fracturing and subsequent tectonic and geomorphic fracturing, and lead to a better

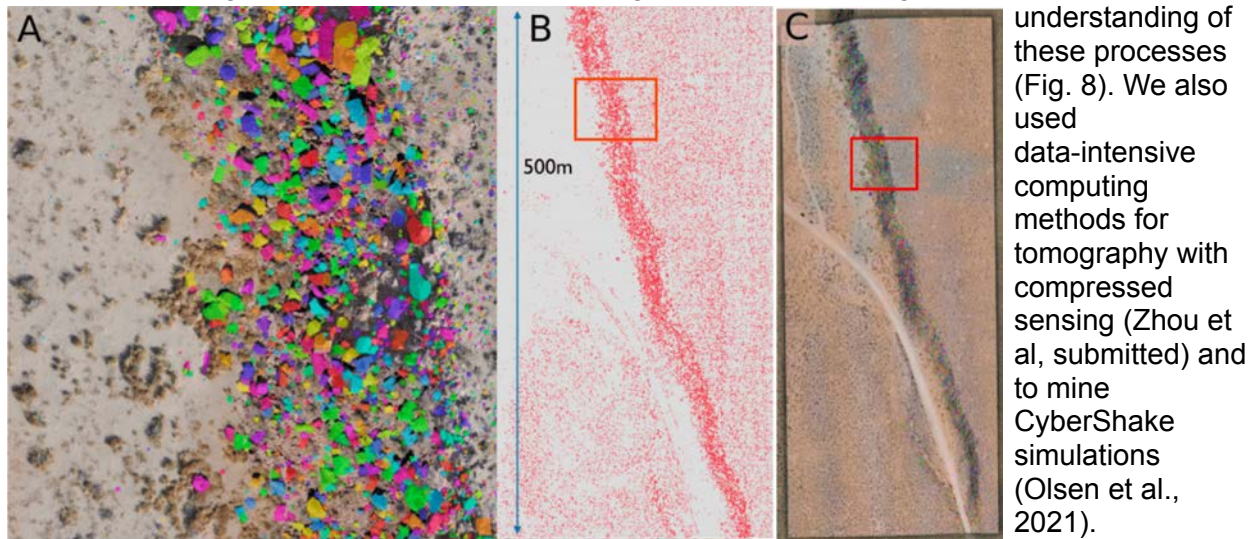
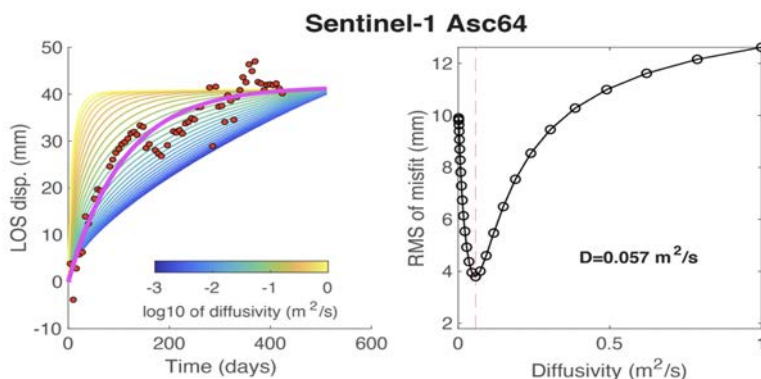


Figure 8. Semantic segmentation applied to rock traits across a fault scarp in the volcanic tablelands near Bishop, California using deep learning from aerial imagery (after Chen et al., 2020).

Theme B. Understanding Earthquake Processes

Analysis of the rich data sets from the 2019 Ridgecrest sequence provided an exceptional opportunity to reach a deeper understanding of earthquake processes.

5. Beyond Elasticity. Liu et al. (2020) found that postseismic deformation far from the fault can be modeled with viscoelastic relaxation of the upper mantle under a Burger's rheology with a transient viscosity of $\sim 10^{18}$ Pa-s and a steady-state viscosity of 4×10^{19} Pa-s. Closer to the fault



the deformation was concentrated around geometric complexities. Some of this deformation may be due to poroelastic response of the shallow crust (Fig. 9).

Figure 9. Modeling InSAR data for the Ridgecrest mainshock with hydraulic diffusivity based on the time series of pixels around the mainshock epicenter

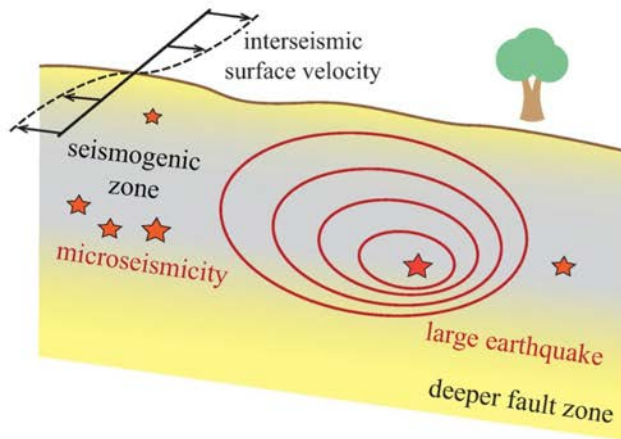
uplift feature. Magenta lines represent the best-fit exponential functions to the respective displacement time series (after Liu et al., 2020).

Much of the work under this thematic element is captured by the SCEC community rheology model (CRM), which provides a 3D description of the ductile rheology of southern California's lithosphere, based on constraints from seismic, geologic, and experimental studies, and was released last year. It includes two components: a 3D geologic framework model (GFM) of southern California's crust, and a set of synthetic aggregate ductile flow laws for each rock type as determined with the aid of seismic velocity analysis (Shen et al., 2020) within the GFM (Montesi et al., 2020). Together with SCEC Community Thermal Model (CTM) temperatures and pressure, this information provides a model for southern California's ductile rheology. Given strain rate, effective viscosity and differential stress may be calculated throughout the region. Shen et al. (2020) uncovered evidence that more mafic crustal composition is correlated with lower strain rates.

One of the current SCEC Technical Activity Groups (TAGs) is focused on the nonlinear response of the shallow crust. Several projects under this TAG quantified the differences between full 3D nonlinear and simpler approximations as well as linear anelastic simulations. Most notable in this regard is the report at the SCEC annual meeting (Roten et al., 2021) of the successful implementation of Iwan plasticity within the 3D anelastic wave propagation (AWP) code. The code was verified against 1D and 2D solutions and shows good parallel efficiency in its GPU implementation, which is important due to the high computational demands of the problem when nonlinearity is distributed.

6. Modeling Earthquake Source Processes. This thematic element spans a broad range of activity ranging from computational simulations of multi-cycle earthquake models to laboratory experiments to the analysis of earthquake data. Progress in the dynamic modeling of sequences of earthquakes and aseismic slip (SEAS) has been a very active Technical Activity Group (TAG). The SEAS effort provides a self-consistent, physics-based framework to connect, interpret, and predict diverse geophysical observations across spatial and temporal scales, and compares solutions to a common problem across different numerical methods with different approximations. The effort is challenging due to the range of time scales and processes involved (Fig. 10). The lack of analytical solutions for 3D problems means that numerical code verification is essential to ensure reliable simulation results. Jiang et al. (2022) summarized findings to date in that while details of model output differ among different approaches, key properties of individual earthquakes, including: rupture style, duration, total slip, peak slip rate, and stress drop, are comparable among even marginally resolved simulations.

A Model ingredients: e.g., surface and subsurface structure, rock properties, friction, and rheology



B Model outputs: e.g., dynamic rupture, ground shaking and displacements, and stress change

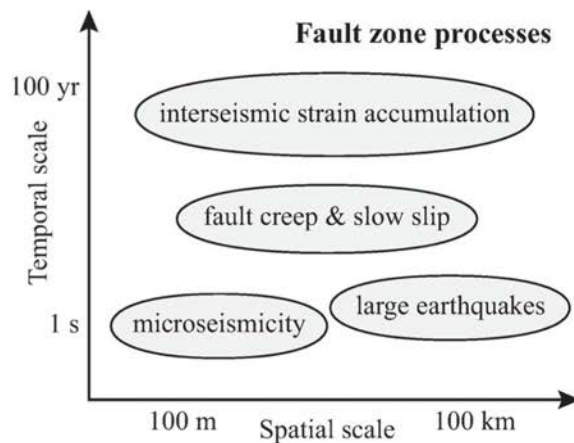
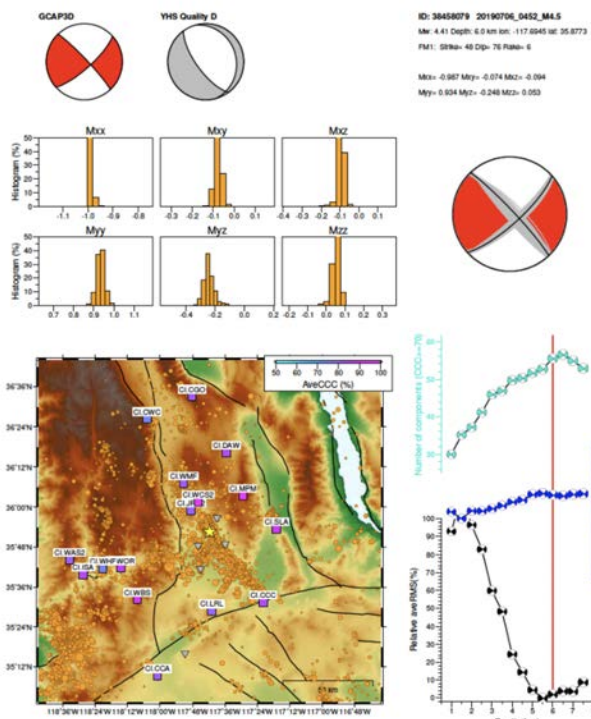


Figure 10. Inputs and outputs in 3D models for SEAS. (a) models incorporate surface/subsurface structure, rock properties, friction, and fault-zone rheology to simulate earthquakes and aseismic deformation. Hypocenters are marked by red stars and rupture fronts are shown as red contours. The seismogenic zone is in gray and aseismic fault zone is in yellow. (b) models produce outputs that include: fault slip, off-fault displacement, and stress change, which can be connected to observations spanning a range of spatial and temporal scales, such as microseismicity, large earthquakes, fault creep, slow slip, and interseismic strain (after Jiang et al., 2022).

Li et al. (2021) calculated a Green's function database for 296 broadband stations using the



SCEC CVM-S4.26 model through 3D finite-difference modeling to develop near-real-time moment tensor solutions. They applied this procedure to more than 2000 small-to-medium-sized earthquakes in Southern California since 1980 and showed that incorporating the 3D velocity model results in more accurate mechanisms, focal depths, and moment magnitudes (Fig. 11). Cheng et al. (2021) derived full source tensor terms of $M > 3$ Ridgecrest aftershocks, and showed that many have significant isotropic components when near-fault data are used in the analysis. Baltay, Abercrombie, et al. (in preparation) are leading a Technical Activity group to compare different methods for stress drop evaluation using waveform data from the Ridgecrest sequence.

Figure 11. Moment tensor inversion for July 6th, 2019 Ridgecrest aftershock. Red beach ball shows estimated mechanism compared to D-quality HASH result in gray. Bootstrap

histograms for 6 moment tensor components and the corresponding nodal lines (gray lines) are shown on the mechanism. Misfit with depth is shown in the lower right panel.

Other recent efforts included work by Milner et al. (2020) on the use of earthquake source scenarios from earthquake simulators for physics-based seismic hazard analysis, work by Chester and Chester (2020) on characterizing flash heating in laboratory experiments, and two TAGs, each of which involved many investigators, for stress drop validation and for multi-cycle simulations.

7. Ground Motion Simulation. SCEC5 efforts in ground motion simulation have seen a sustained benefit from access to HPC resources as described in the abstract. Recently, a multi-institutional effort (Withers et al., 2020) was conducted to use dynamic rupture simulations to characterize seismic hazard by generating earthquake sources that produce synthetic ground motion across a wide frequency bandwidth for magnitudes and distances for which empirical datasets are poorly populated. This project focused on modeling the effect of fault roughness (Fig. 12), heterogeneous stress and friction on strong ground motion. As noted above, Roten et al. (2021) have introduced the ability to allow Iwan plasticity in the AWP ground motion simulation code to account for nonlinear response of the shallow crust. We have continued to implement nonlinear site-response modules on the Broadband Platform (BBP) and in 3D simulations where Nweke et al. (2021) have attempted to validate nonlinear response calculations for both CVM-S4 and CVM-H.

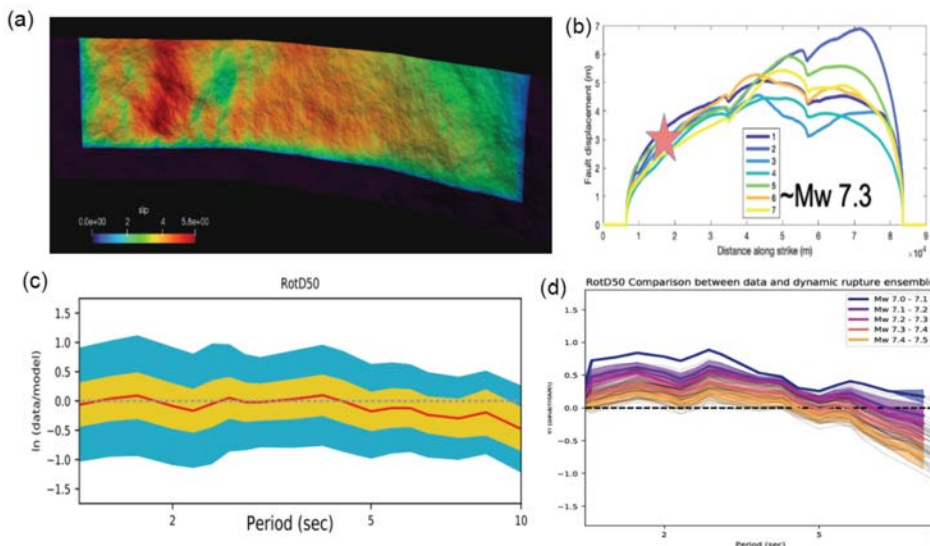


Figure 12. (a) Example of final slip along one rough fault and (b) fault displacement along 7 realizations of ruptures of Mw 7.3. Realizations vary the fault roughness profiles and stress drop. (c) Goodness of fit for average of 4 GMMs compared with data for one set of simulations. (d) Ensemble comparisons between data and

GMMs for a range of magnitudes. (after Withers et al., 2021)

8. Induced Seismicity. When the SCEC5 proposal was funded we were asked to coordinate our research effort in this area with a USGS liaison (Nick Beeler). Our effort under this thematic element has been modest. Most recently, Yang and Dunham (2021) modeled aseismic slip that occurs in response to fluid injection into a permeable fault governed by rate-and-state friction. They account for porosity and permeability changes that accompany slip, including dilatancy, and quantify how these processes affect pore pressure diffusion, which couples to aseismic slip. Initially, slip is negligible and pore pressure follows a linear diffusion model. In the second phase, an aseismic slip front expands outward and dilatancy causes pore pressure to depart from the linear diffusion model. The migration rate is strongly influenced by proximity to failure and injection rate. We also note that we have ongoing studies of seismicity, velocity models and

deformation in the Salton Sea Area, which hosts a large geothermal field, and a project initiated in 2021 to study the triggering of earthquakes in deep hydrocarbon basins in southern California.

Theme C. Characterizing Seismic Hazards

9. Probabilistic Seismic Hazard Analysis. Much of the effort under SCEC5 has the potential to reduce uncertainty in PSHA through improved rupture forecasts and more accurate physics-based ground motion simulations. The latter depends critically on improving the community velocity models, which is one of the original models in the Unified Structural Representation. SCEC investigators use arrival times, complete waveforms (Tape and Thurber, 2020), ambient field correlations (Nayak and Thurber, 2020), wave polarization (Qin and Ben-Zion, 2021), and the joint variation of horizontal seismometer and atmospheric pressure data (Wang and Tanimoto, 2020) for this purpose. Several studies used earthquake and ambient noise data recorded by regional stations and dense seismic arrays around the 2019 Ridgecrest earthquakes to derive a seismic velocity models on a regional scale (White et al., 2021), fault zone scale (Qiu et al., 2021) and intermediate scale (Zhou et al., 2021). A clear challenge to this effort is to merge results to account for the state of information (Ajala et al., 2020) on the elastic, anelastic, and inelastic structure of the Earth's crust across all relevant scales. Lu and Ben-Zion (2021) found in validation analysis of regional CVMs that significant deviations from observations are produced by the lack of knowledge about basin properties. Due to their important influence on strong ground motion, we have paid particular attention to the structure of basins, as shown in a subsequent section.

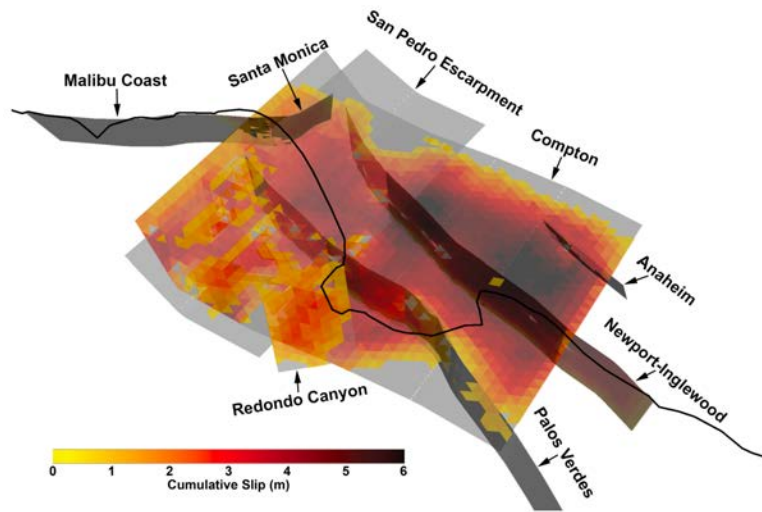
We continue to develop RSQSim simulations (Milner et al., 2020) using earthquake source scenarios for physics-based seismic hazard analysis, and have developed improved plausibility filters for multi-segment rupture based physics-based earthquake simulator output (Milner et al., submitted).

CyberShake is a physics-based approach to hazard analysis which estimates ground motions from simulations of 100s of thousands of scenario earthquakes based on rupture forecasts, to generate 100s of millions of ground motion simulations, from which 10s of billions of intensity measures are derived and used to construct hazard maps. The scale of the effort requires state-of-the-art HPC, as described in the abstract, but unlike traditional approaches this leverages knowledge of the earthquake source and the crust. Hazard analysis is foundational to risk reduction, and through SCEC's efforts, CyberShake results are starting to be used for engineering practice. Improving accuracy of the simulations, quantifying uncertainty, expanding the geographical reach, and extending to higher frequencies are all active research areas. CyberShake demonstrates SCEC's ability to integrate vertically across disciplines, by using rupture forecasts based on paleoseismology and geodesy, slip models based on pseudo-dynamic rupture simulations, and ground motions based on HPC simulations of wave propagation through 3D crustal models. In addition to ground motion, we have worked to develop probabilistic forecasting for near-fault displacement.

Decades of meticulous work on sites that preserve a record of surface-rupturing earthquakes has led to event chronologies on major California faults. The record of historical events (based on macroseismic and instrumental data) and paleo-events (based on paleoseismology and surface ruptures) leads to a conundrum. The two populations show similar rates of earthquakes in the pre-instrumental era before 1920. That rate continues in the instrumental record; yet, contrary to expectations, there is a hiatus in surface-rupturing events on major faults over the last 100 years. Based on assumed recurrence models the hiatus is extremely unlikely (~0.3% probability). Resolving this conundrum is critical to long-term forecasting (Biasi and Scharer,

2019). There is the potential for bias in the data (Williams, 2021), or perhaps the assumed recurrence models are incorrect.

10. Operational Earthquake Forecasting. SCEC has worked on earthquake predictability, including physics-based forecasting models and coordinating with the Working Group on California Earthquake Probabilities (WGCEP) and the Collaboratory for the Study of Earthquake Predictability (CSEP). Multi-fault ruptures have the potential to affect forecasts based on paleoseismic data if they are not properly accounted for. SCEC developed a new framework to represent and build realizations of complex multi-fault ruptures (Fig. 13). These were combined with stress-change calculations to develop better complex rupture plausibility criteria based on



Coulomb failure stress criteria. Milner et al (2021) completed RSQSim-CyberShake hazard and variability calculations for a non-ergodic model for southern California. Ben-Zion and Zaliapin (2020) presented retrospective evidence for localization of seismicity related to future $M > 7$ mainshocks in southern and Baja California.

Figure 13. Perspective view (looking north) of a complex synthetic $M 7.8$ RSQSim rupture in the Los Angeles Basin reminiscent of the Kaikoura. New

Zealand earthquake. Rupture nucleates on the Compton fault and spreads to the Newport–Inglewood, Palos Verdes, and other nearby faults. Ten UCERF3 fault sections participate, but the 3 aforementioned faults account for over 90% of the total seismic moment. Darker colors represent areas of larger slip. (after Milner et al., 2021).

The CSEP virtual platform supports global research on earthquake predictability, initiated by SCEC to evaluate earthquake forecasts and to advance the understanding of earthquake predictability. CSEP testing centers are operational in California, New Zealand, Japan, China, and Europe (Schorlemmer et al., 2018) with 442 models under evaluation. The California center, operated by SCEC, tests 30-minute, 1-day, 3-month, 1-year, and 5-year forecasts for California, the Western Pacific, and global regions.

11. Earthquake Early Warning We were advised that the USGS considers earthquake early warning to be adequately covered under other existing research programs so we did not pursue research under this thematic element, except when there was research that had this as part of its purview.

12. Post-Earthquake Rapid Response. There is a continuing need to develop and improve post-earthquake rapid response as demonstrated by the 2019 Ridgecrest earthquake sequence. Coordination and planning is an essential element to the success of past and future efforts. SCEC held its latest virtual workshop from January 13-14, 2022 on earthquake response planning that was attended by over 150 scientists with earthquake response experience. Participants included 44 who were involved in the Ridgecrest response and 35 early career

scientists, as well as participants from 18 countries. The evolving nature of data and means of data collection require that plans be updated frequently. The workshop should lead to better results from future earthquakes by: adopting best practices for data collection, continuing engagement between field and end users, updates of roles and responsibilities, training and workforce development, and engagement with strategic partners.

Theme D. Reducing Seismic Risk

13. Risk to Distributed Infrastructure. SCEC works with engineers and stakeholders to use our simulation capabilities, particularly for physics-based ground motion simulations, to enable new modes of assessing, and reducing risk to distributed infrastructure. A particularly notable example is Lee et al. (2020), who compared the risk to the LADWP water pipeline distribution system from CyberShake simulations with that from empirical GMM. They found that seismic risk developed from physics-based earthquake simulations for spatially distributed systems can differ substantially from those obtained from conventional approaches (Fig. 14). These differences have significant policy implications, and are important for estimates of resources needed for agencies to adequately plan for and mitigate the risks to meet the system resilience criteria.

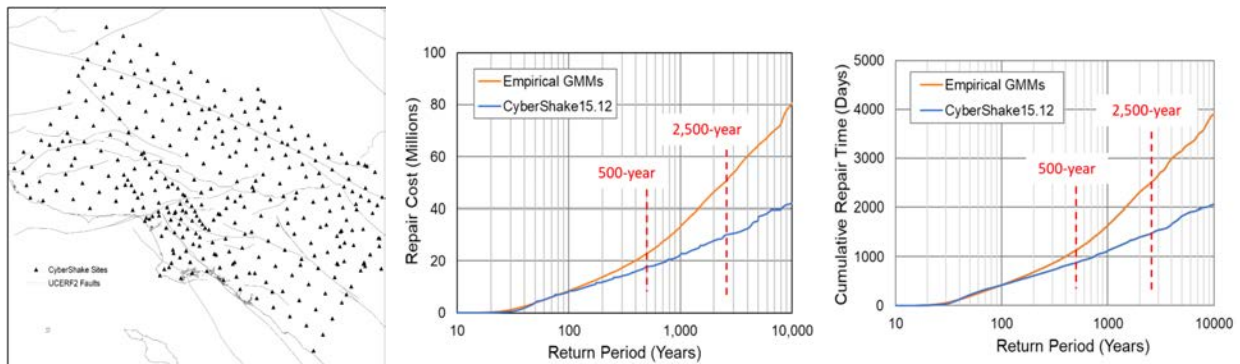


Figure 14. Left shows distribution of Cybershake 5.12 hazard simulations. Panels at right show (a) pipe repair cost and (b) repair time as a function of return periods for CyberShake vs. NGA-West2 empirical GMMs.

Other areas of increased understanding that emerged during the SCEC5 project period include correlation structure of ground motion, which can be explored through simulations (Bayless and Condon, 2021) and in modeling the distribution of near-fault surface deformation (Goulet et al., 2021). Both of these may be critically important to assessing system-level earthquake threats to distributed infrastructure.

14. Velocity and Rheology of Basin Sediments. During the SCEC5 project period we have worked to understand and characterize near-surface site and basin structure due to its importance for physics-based ground motion simulations. For basin structure, SCEC investigators deployed temporary dense arrays, incrementally across key parts of the Los Angeles Basin. The combination of sharp basin-bedrock velocity contrasts at their boundaries and their non-vertical character, makes them difficult to recover accurately through conventional tomography, which uses smoothing to regularize the inverse problem. Muir et al. (2020) used the level set approach of Muir and Tsai (2020) to update basin structure in CVM-S 4.26 (Fig. 15). They found a deepening of the Los Angeles Basin towards the northeast, which is coincident with the inferred trace of the Upper Elysian Park Fault. Within the basin, this deepening increases the amplification of Love waves in the 4-9 s period band, with consequently increased basin resonance of these waves for tall buildings with similar resonant periods.

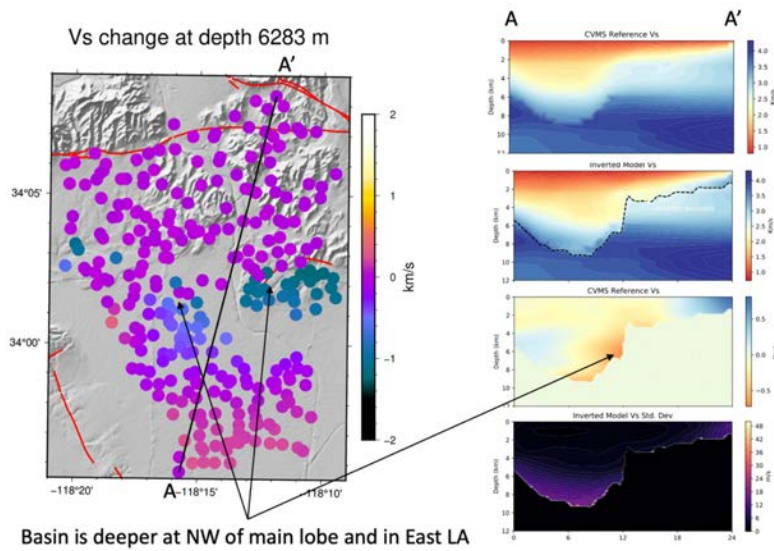


Figure 15. Results of local tomographic update utilizing the level set method (after Muir et al., 2020). Panels on the right are, from top to bottom, the reference CVM-S 4.26 profile, inversion result with inferred boundary of local update shown by a black dotted line, difference in the two models, and estimated uncertainty in the inversion.

Shaw et al. (2021) developed basin velocity representations as standalone CVM components that can be incorporated into current and future velocity models. These models describe V_p , V_s , density, and other properties for the major sedimentary basins in southern California. This framework will support alternative basin models, enabling comparison and evaluation of sedimentary basin structure and sediment velocity characteristics (Fig. 16).

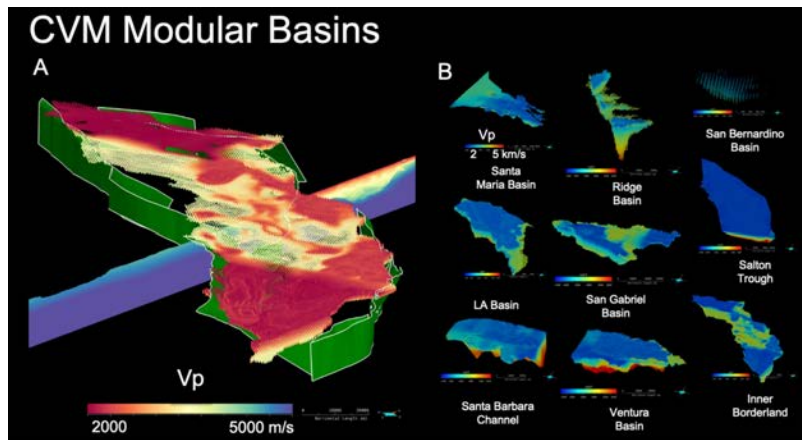


Figure 16. Perspective views of CVM basin models. A: The Inner California Borderlands model, showing V_p for basin sediments and regional faults from the SCEC CFM used to define the basin extent. B: Views of individual sediment basin models. These models have been generated as a series of gridded voxets accessible through the UCV framework. Associated surfaces (topography,

sediment basement interface, bounding fault surfaces) will be made available through the CVM website.

3. Communication, Education, and Outreach Accomplishments

The Communication, Education, and Outreach (CEO) program of SCEC5 expanded knowledge of earthquake science, risk, and preparedness through two focus areas: Public Education & Preparedness (PEP) and Experiential Learning & Career Advancement (ELCA), spanning six programs (Fig. 17).

These complementary focus areas communicate and train about science, risk, and preparedness through community engagement activities such as *Great ShakeOut Earthquake Drills*, multi-faceted communication channels, and extensive partnership networks, while broadening participation of underrepresented groups in the STEM workforce through professional development opportunities including internships, mentoring (and mentorship training), networking opportunities, and other support.

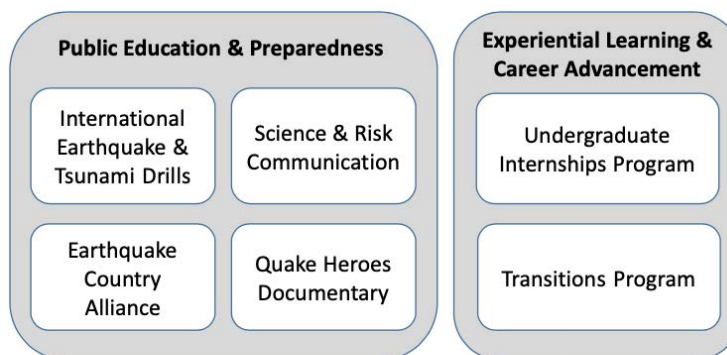


Figure 17. Two SCEC Communication, Education, and Outreach focus areas, spanning six programs.

Public Education and Preparedness.

SCEC is a national and global leader in promoting the use of earth science and consensus safety guidance via Global Earthquake and Tsunami Campaigns. SCEC and many partners created the *Great ShakeOut Earthquake Drill* (ShakeOut.org) in 2008, based on the USGS-led *ShakeOut Scenario*. SCEC then expanded ShakeOut across the nation, then worldwide, and now coordinates 26 official regions across the U.S. and around the world. With participation of schools and organizations from more than 40 countries this involved a record 68 million people globally in 2019 (Fig. 18), mostly on International Shakeout Day (third Thursday of October). Due to COVID-19, we

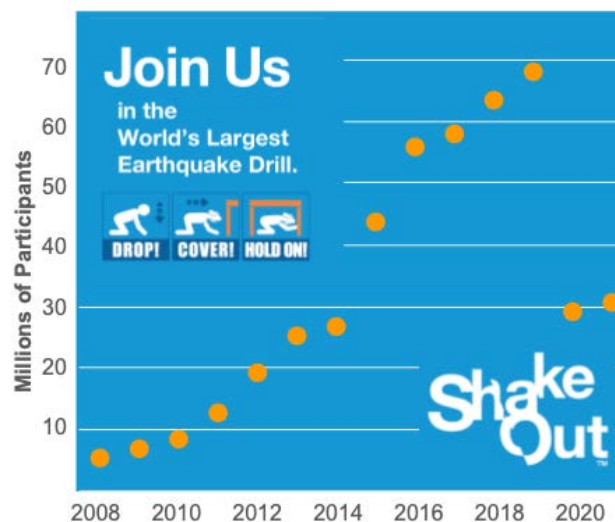


Figure 18. Annual global participation in Great ShakeOut Earthquake Drills from inception to 2021. The drop in 2020 due to the pandemic was followed by a partial recovery in 2021.

provided new ways to participate in 2020 and 2021, including “Great Online ShakeOut” broadcasts that reached more than 100,000 people and new resources for leading organizational drills via teleconference. ShakeOut is now a global messaging platform (>500K website annual visits on average) for communicating science and preparedness information, which leads to increased levels of mitigation and planning (Wood, 2015). The prime example is how “Drop, Cover, and Hold On” graphics and safety messaging (EarthquakeCountry.org/step5) are now routinely being incorporated into local, national, and international materials and

messaging efforts. We also guided the creation of “Rocket Rules” earthquake education materials for grades K-3 (RocketRules.org/earthquake), which includes earthquake early warning education; similarly, ShakeOut is now a common platform for educating West Coast residents about the USGS’ ShakeAlert® Earthquake Early Warning System. In addition to our promotion of earthquake drills, SCEC is supported by NOAA (via CalOES) to create and manage TsunamiZone.org, which adapts the ShakeOut registration system to assess participation in Tsunami activities in west coast states and across many territories and countries within and bordering the Caribbean.

SCEC CEO also coordinates Science, Risk, and Crisis Communication activities, via information distributed to the public and in the geoscience community via the news media, the Center’s webpage (SCEC.org) (>140K visitors/year), quarterly newsletters, social media channels, the SCEC Annual Meeting, and science workshops. All these channels are engaged after major earthquakes (the 2019 Ridgecrest sequence resulted in more than 600 mentions of SCEC in the news). We partner with other organizations for joint activities, such with EERI in 2018 of the *11th National Conference on Earthquake Engineering* in Los Angeles which increased visibility of SCEC research. In 2003 SCEC created the Earthquake Country Alliance (ECA) as a partnership organization that now involves more than 4,000 public, private, and grassroots leaders. With additional support from the state of California and FEMA, SCEC coordinates regional and sector-based groups, delivers 10-15 local workshops and statewide webinars each year, and creates documents and graphics distributed via ECA’s websites (EarthquakeCountry.org and Terremotos.org (Spanish) and social media channels. During the pandemic we moved activities online and created 12 new documents in 15 languages (EarthquakeCountry.org/languages), including guidance for people with disabilities (EarthquakeCountry.org/accessibility). All resources build on ECA’s Seven Steps to Earthquake Safety (EarthquakeCountry.org/sevensteps). This is also featured in SCEC’s Quake Heroes Documentary (QuakeHeroes.org), a 55-minute professionally produced film that vividly portrays the stories of people who experienced the Northridge earthquake, along with comments from SCEC scientists, engineers, and first responders. The release of the film, with large in-person screenings across California, has been delayed due to COVID but will be launched in 2022, along with a high-school toolkit with science and engineering lessons.

Experiential Learning and Career Advancement. SCEC has fostered workforce development during SCEC5 via its longstanding undergraduate Internship Programs (SCEC.org/internships) and the new Transitions Program (SCEC.org/transitions).



Figure 19. Undergraduate participants of the 2021 SOURCES Internship Program

The *Summer Undergraduate Research Experience* ([SCEC.org/internships/sure](https://scec.org/internships/sure)) program has funded individual internships with SCEC scientists for nearly 300 undergraduate students from across the country since 1994. The *Undergraduate Studies in Earthquake Information Technology* ([SCEC.org/internships/useit](https://scec.org/internships/useit)) program (2002-2019) brought together 20-25 students each summer at USC where they learned and applied computer science skills to “Grand Challenges” of earthquake science. To increase our reach, broaden participation, and maintain undergraduate research opportunities during the pandemic, we created the *Supported Opportunities for Undergraduates and Researchers to Collaborate on Earthquake Science* internship program ([SCEC.org/internships/sources](https://scec.org/internships/sources)) which facilitated remotely mentored research experiences for 26 students (including 14 women and 12 first generation, 14 URMs, and 3 community college students).

We created the *Transitions Program* in 2017 to support junior members of the community across key career transitions (into graduate school, academia, industry, etc.). Components include networking events ([SCEC.org/workshops/2021/transitions](https://scec.org/workshops/2021/transitions)) at the SCEC Annual Meeting, AGU, and other meetings with mentors who share guidance about navigating key transitions, lightning talks to increase visibility of early career scientists, research and travel awards ([SCEC.org/elca/awards](https://scec.org/elca/awards)) to support early career researchers to build their professional profile by presenting their own research, and research mentorship training ([SCEC.org/workshops/2019/mentor-training](https://scec.org/workshops/2019/mentor-training)) for early career researchers to improve mentorship skills and relationships in STEM.

Project Data:

SCEC Datasets

When SCEC releases datasets of significance to the research community, these data products are assigned permanent digital object identifiers and committed to public scientific data repositories (including IRIS Data Management Center, the NHERI DesignSafe Data Repository, and Zenodo) with the appropriate metadata required to make them useful to the community. The table below includes information on the most recent release date of the datasets and the cumulative total of unique downloads and visitors for each when available.

SCEC Dataset	Data Repository	Release Date (most recent)	Downloads (cumulative)	Visitors (cumulative)
Community Thermal Model (CTM)	https://zenodo.org/record/4010834	Aug 2020	41	172
Community Velocity Model - Harvard (CVM-H)	http://ds.iris.edu/ds/products/emc-cv m_h_v15_1	Aug 2020	N/A	N/A
SCEC Community Rheology Model (CRM)	https://doi.org/10.5281/zenodo.4579627	Sept 2020	26	150
SCEC Community Fault Model (CFM)	https://doi.org/10.5281/zenodo.5899364	Jan 2022	169	807

SCEC Community Geodetic Model (CGM)	https://doi.org/10.5281/zenodo.4926528	Oct 2016	5	69
PRJ-1975: SCEC Broadband Platform (BBP) Study 17.3 Dataset	https://doi.org/10.17603/DS2267Q	June 2018	43	57
CyberShake Time Series for Response History Analysis	https://doi.org/10.5281/zenodo.3922295	June 2020	115	416
Site-Specific MCER Response Spectra for Los Angeles Region based on 3-D Numerical Simulations and the NGA West2 Equations	https://doi.org/10.5281/zenodo.3247804	April 2018	168	25
DataSet La Habra Earthquake	https://doi.org/10.5281/zenodo.6403870	Jan 2022	22	289
A Novel Hybrid Finite Element-Spectral Boundary Integral Scheme for Modeling Earthquake Cycles: Application to Rate and State Faults with Low-Velocity Zones	https://doi.org/10.5281/zenodo.3379091	Aug 2019	95	65
Mainshock+aftershock forecasts from Regional Earthquake Likelihood Models (RELM) experiment	https://doi.org/10.5281/zenodo.5080947	July 2021	98	49
Consistency test scores for aftershock+mainshock RELM forecasts	https://doi.org/10.5281/zenodo.5083365	July 2021	12	18
Mainshock+aftershock M4.95+ seismicity forecasts from RELM and the multiplicative hybrid earthquake models (Rhoades et al., 2014)	https://doi.org/10.5281/zenodo.5578662	Oct 2021	610	147
Data for pyCSEP: A Software Toolkit for Earthquake Forecast Developers	https://doi.org/10.5281/zenodo.5777992	Dec 2021	77	71
Two global ensemble M5.95+ seismicity models obtained from the combination of interseismic strain rates and earthquake-catalog data	https://doi.org/10.5281/zenodo.613735999364	Jan 2022	7	55

SCEC Software Releases

SCEC develops and maintains a suite of open-source scientific software applications, used in SCEC research and provided to the larger geoscientific community for advancing seismic hazard research. Distributions are released via GitHub software repositories, where we track the number of unique repo clones and unique visitors. SCEC also releases software through

Zenodo, through PyPi, and through DockerHub. We began tracking SCEC software downloads in 2020 and continued through Jan 2022. Views and download metrics are a proxy for the size of the software user community.

SCEC Software	Github Repository	Release Date (most recent)	Unique Clones (2020)	Unique Views (2020)	Unique Clones (Jan 2021-Jan 2022)	Unique Views (Jan 2021-Jan 2022)
Broadband Platform	https://github.com/SCECcode/bbp	Sept 2020	122	741	165	861
BBP Docker Images	https://hub.docker.com/orgs/sceccode/bbp_19_8	Dec 2021	-	-	33	-
CyberShake Platform	https://github.com/SCECcode/cybershake-core	Jan 2021	-	-	-	-
FAST	https://github.com/stanford-futuredata/FAST	Oct 2020	122	882	116	844
OpenSHA	https://github.com/opensha	June 2021	-	-	296	623
ts-process	https://github.com/SCECcode/ts-process	Dec 2020	-	-	33	124
UCVM	https://github.com/SCECcode/ucvm	Nov 2021	240	561	219	499
UCVM Docker Images	https://hub.docker.com/orgs/sceccode/ucvm_1210_cvm_s5	Nov 2021	-	-	382	-
CSEP	https://github.com/SCECcode/pycsep	Sept 2020	54	158	305	677
CSEP PyPI	https://pypistats.org/packages/pycsep	Jan 2022	-	-	54	-
Total =			538	2,342	1603	4,489

SCEC Websites

Below we provide an overview and usage metrics for SCEC's major websites, software releases, and selected datasets. Websites and webpages that are new or had significant improvements are also listed.

Website Metrics

Website	Users per Month*	
	2020	Jan 2021 - Jan 2022
SCEC.org	11,180	10,030

shakeout.org	37,896	38,301
earthquakecountry.org	26,311	17,408
tsunamizone.org	2,904	6,304
terremotos.org	1,383	1,086
shakeoutbc.ca	3,046	3,323
<a href="http://strike.scec.org/scecpe
dia">strike.scec.org/scecpe dia	436	337
OpenSHA.org	405 †	447

* Average monthly users from Google Analytics data

† Average users since new site launched in June 2020

Community Model Websites:

SCEC has developed web-based tools for viewing and querying several of the SCEC Community Models. These CXM websites provide researchers with access to the SCEC community models during their development. The websites are updated when new versions of the community models are available, and the new models are immediately accessible to users without requiring installation of new software on their computers. The websites are developed using a common software and computing environment that includes Postgres databases with PostGIS extensions, map-based displays using Leaflet, scientific plots using Plotly, 3D visualizations using VTK.js, and Apache web servers hosted on EC2 instances for reliability.

Community Fault Model (CFM) Viewer: The CVM viewer is a map-based viewer and data access website for the Community Fault Model (CFM). This site has been used by the SCEC research community to view alternative fault geometries. Displays include map-based fault locations, and 3D visualization of fault geometries, and relocated seismicity overlays. <https://www.scec.org/research/cfm-viewer/>

Geological Framework Model (GFM) and Community Thermal Model (CTM) Viewer: The GFM/CTM website implements a map-based viewer for the SCEC Geological Framework (GFM) Model and the Community Thermal Model (CTM) which are two essential components of the SCEC Community Rheology Model (CRM). The map-based display shows the geographical distribution of the GFM zones, and users can query locations and depths in southern California for properties defined in the GFM and CTM. http://moho.scec.org/GFM_web/web/viewer.php

Community Geodetic Model (CGM) Viewer: The Community Geodetic Model (CGM) website implements a map-based viewer for both GNSS and InSAR data with the ability to plot time series and download datasets in several formats. <http://moho.scec.org/cgm-viewer/>

Community Model (CM) Viewer: The SCEC Community Model (CM) Viewer implements a map-based viewer that provides an integrated view of the SCEC CVMs, CFM, GFM, and CTM models. Users can query locations in Southern California for material properties from selected Community Velocity Models, and generate an Elevation profile plot, Depth Profile plot, Cross Section plot, or Horizontal Slice plot on demand using the plotting utility tools from UCVM. http://moho.scec.org/UCVM_web/web/viewer.php

Additional New and Updated Websites:

SCEC developed several additional websites to improve access to community research products and information. These sites include access to a SCEC meeting poster archive, guidance on leading earthquake response activities during the pandemic, and the SCEC CSEP Project homepage and software documentation sites.

SCEC Meeting Poster Archive Website: More than 290 posters were presented at the 2021 SCEC Annual Meeting (9/12/21 - 9/17/21). 142 poster authors agreed to showcase their posters publicly in our poster archive linked here. <https://www.scec.org/meetings/2021/am/posters/archive>

ShakeOut During COVID-19 Website: Special webpage for all ShakeOut regions about how to organize and lead earthquake drills during the COVID-19 pandemic, including simple presentations for drill leaders to use online (or in-person). <https://www.ShakeOut.org/COVID-19>

SaferAtHome Website: Compilation of all seven webinars in ECA's Safer At Home Webinar series, each focused on one of the *Seven Steps to Earthquake Safety*. <https://www.EarthquakeCountry.org/SaferAtHome>

CSEP Project Homepage: This website provide a new homepage for the CSEP project. Content is being updated and expanded with input from several CSEP working group participants. <https://cseptesting.org/>

CSEP Software Documentation Website: This website provides documentation for PyCSEP, a new unified set of software tools, for (1) evaluating probabilistic earthquake forecasts, (2) working with earthquake catalogs in this context, and (3) creating visualizations. <https://docs.cseptesting.org/>

Acknowledgment of Support: This material is based upon work supported by the U.S. Geological Survey under Grant No. G17AC00047.

Disclaimer: The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Geological Survey. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Geological Survey.

SCEC Publications

This section lists the publications and products submitted and/or published in the SCEC community database (www.scec.org/publications) from Feb 1, 2017 to Dec 31, 2021. Each publication is preceded by its SCEC publication number.

Journal Articles (534)

- 2067 Small, P., Gill, D., Maechling, P. J., Taborda, R., Callaghan, S., Jordan, T. H., Ely, G. P., Olsen, K. B., & Goulet, C. A. (2017). The SCEC Unified Community Velocity Model Software Framework. *Seismological Research Letters*, 88(5).
- 6019 Shi, J., & Asimaki, D. (2017). From stiffness to strength: Formulation and validation of a hybrid hyperbolic nonlinear soil model for site response analyses. *Bulletin of the Seismological Society of America*, 107(3), 1336-1355.
- 6064 Luttrell, K., & Smith-Konter, B. (2017). Limits on crustal differential stress in southern California from topography and earthquake focal mechanisms. *Geophysical Journal International*, 211(1), 472-482.
- 6238 Onderdonk, N. W., McGill, S. F., & Rockwell, T. K. (2018). A 3700 year paleoseismic record from the northern San Jacinto fault and implications for joint rupture of the San Jacinto and San Andreas faults.. *Geosphere*,.
- 6260 Kagan, Y. Y. (2017). Worldwide earthquake forecasts. *Stochastic Environmental Research and Risk Assessment (SERRA)*, 31(6), 1273-1290.
- 6265 Zaliapin, I., & Kreemer, C. W. (2017). Systematic fluctuations in the global seismic moment release. *Geophysical Research Letters*, 44(10), 4820-4828.
- 6272 Rubino, V., Rosakis, A. J., & Lapusta, N. (2017). Understanding dynamic friction through spontaneously evolving laboratory earthquakes. *Nature Communications*, 8.
- 7056 Biasi, G. P., & Wesnousky, S. G. (2017). Bends and Ends of Surface Ruptures. *Bulletin of the Seismological Society of America*, 107(6), 2543-2560.
- 7060 Reynolds, L. C., Simms, A. R., Ejarque, A., King, B. L., Anderson, S., Carlin, J., Bentz, J. M., Peters, R. B., Rockwell, T. K., Jaffe, B., & Richmond, B. M. (2018). Coastal flooding and the 1861-2 California storm season. *Marine Geology*, 400, 49-59.
- 7068 Salisbury, J. B., Rockwell, T. K., & Buga, M. T. (2017). Paleoseismic Evidence for the 21 April 1918 Mw 6.9 Surface Rupture of the Northern Clark Strand of the Central San Jacinto Fault, California. *Bulletin of the Seismological Society of America*, 107(2), 1027-1032.
- 7093 Forand, D. H., Evans, J. P., Janecke, S. U., & Jacobs, J. (2017). Insights into fault processes and the geometry of the San Andreas fault system: Analysis of core from the deep drill hole at Cajon Pass, California . *Geological Society of America Bulletin*, 117.
- 7104 Bradley, B. A., Pettinga, D., Baker, J. W., & Fraser, J. (2017). Guidance on the Utilization of Earthquake-Induced Ground Motion Simulations in Engineering Practice. *Earthquake Spectra*, 33(3), 809-835.
- 7118 McClure, M., Riley, G., Kitkwan, C., & Ranganath, R. (2017). Identifying potentially induced seismicity and assessing statistical significance in Oklahoma and California. *Journal of Geophysical Research*, 122(3), 2153-2172.
- 7139 Liel, A. B., DeBock, D. J., Harris, J. R., Ellingwood, B. R., & Torrents, J. M. (2017). Reliability-based design snow loads: II. Reliability assessment and mapping procedures.. *Journal of Structural Engineering*, 143(7).
- 7145 Porter, K., Field, E., & Milner, K. (2017). Trimming a Hazard Logic Tree with a New Model-Order-Reduction Technique. *Earthquake Spectra*, 33(3), 857-874.

- 7152 Salisbury, J. B., Arrowsmith, R., Brown, N. D., Rockwell, T. K., Grant Ludwig, L., & Akciz, S. O. (2018). The age and origin of small offsets at Van Matre Ranch along the San Andreas Fault in the Carrizo Plain, California. *Bulletin of the Seismological Society of America*, 108(2), 639–653.
- 7163 Field, E. H., Milner, K. R., Hardebeck, J. L., Page, M. T., van der Elst, N. J., Jordan, T. H., Michael, A. J., Shaw, B. E., & Werner, M. J. (2017). A Spatiotemporal Clustering Model for the Third Uniform California Earthquake Rupture Forecast (UCERF3-ETAS): Toward an Operational Earthquake Forecast. *Bulletin of the Seismological Society of America*, 107(3), 1049-1081.
- 7165 Field, E. H., Jordan, T. H., Page, M. T., Milner, K. R., Shaw, B. E., Dawson, T. E., Biasi, G. P., Parsons, T., Hardebeck, J. L., Michael, A. J., Weldon, R. J., Powers, P. M., Johnson, K. M., Zeng, Y., Felzer, K. R., van der Elst, N. J., Madden, C., Arrowsmith, R., Werner, M. J., & Thatcher, W. R. (2017). A Synoptic View of the Third Uniform California Earthquake Rupture Forecast (UCERF3). *Seismological Research Letters*, 88(5), 1259-1267.
- 7166 Erickson, B. A., Dunham, E. M., & Khosravifar, A. (2017). A finite difference method for off-fault plasticity throughout the earthquake cycle. *Journal of the Mechanics and Physics of Solids*, 109, 50-77.
- 7167 Song, X., & Jordan, T. H. (2017). Stochastic Representations of Seismic Anisotropy: Transversely Isotropic Effective Media Models. *Geophysical Journal International*, 209(3), 1831-1850.
- 7171 Jiang, J., & Lapusta, N. (2017). Connecting depth limits of interseismic locking, microseismicity, and large earthquakes in models of long-term fault slip. *Journal of Geophysical Research: Solid Earth*, 122.
- 7176 Hauksson, E., Meier, M., Ross, Z. E., & Jones, L. M. (2017). Evolution of seismicity near the southernmost terminus of the San Andreas Fault: Implications of recent earthquake clusters for earthquake risk in southern California. *Geophysical Research Letters*, 44(3), 1293-1301.
- 7187 Scharer, K., Weldon, R., Biasi, G., Streig, A., & Fumal, T. (2017). Ground-rupturing earthquakes on the northern Big Bend of the San Andreas Fault, California, 800 A.D. to Present. *Journal of Geophysical Research: Solid Earth*, 122(3), 2193-2218.
- 7189 Harris, R. A. (2017). Large Earthquakes and Creeping Faults. *Reviews of Geophysics*, 55(1), 169–198.
- 7190 Davis, P. M. (2017). Dependence of the Brittle Ductile Transition on Strain-Rate-Dependent Critical Homologous Temperature. *Geophysical Journal International*, 209(2), 1180-1194.
- 7201 Archuleta, R. J., & Ji, C. (2016). Moment rate scaling for earthquakes $3.3 \leq M \leq 5.3$ with implications for stress drop. *Geophysical Research Letters*, 43(23), 12,004-12,011.
- 7204 Sleep, N. H., & Nakata, N. (2017). Nonlinear Attenuation of S Waves by Frictional Failure at Shallow Depths. *Bulletin of the Seismological Society of America*, 107, 1828–1848.
- 7207 McClure, M., Gibson, R., Chiu, K., & Ranganath, R. (2017). Identifying potentially induced seismicity and assessing statistical significance in Oklahoma and California. *Journal of Geophysical Research: Solid Earth*, 122.
- 7218 Zhang, Q., Lin, G., Zhan, Z., Chen, X., Qin, Y., & Wdowinski, S. (2017). Absence of remote earthquake triggering within the Coso and Salton Sea geothermal production fields. *Geophysical Research Letters*, 44(2), 726-733.
- 7222 Scott, C. P., & Lohman, R. B. (2016). Sensitivity of earthquake source inversions to atmospheric noise and corrections of InSAR data. *Journal of Geophysical Research: Solid Earth*, 121(5), 4031-4044.
- 7223 Moser, A. C., Evans, J. P., Ault, A. K., Janecke, S. U., Bradbury, K. K., & Reiners, P. (2017). (U-Th)/He thermochronometry reveals Pleistocene punctuated deformation and synkinematic hematite mineralization in the Mecca Hills, southernmost San Andreas Fault zone. *Earth and Planetary Science Letters*, 476, 87-99.

- 7224 Jänecke, S. U., Kenney, M., Persaud, P., Markowski, D. K., & Evans, J. P. (2018). Durmid ladder structure and its implications for the nucleation sites of the next $M > 7.5$ earthquake on the San Andreas fault or Brawley seismic zone in southern California. *Lithosphere*, 10(5), 602-631.
- 7235 Trugman, D. T., & Shearer, P. M. (2017). Application of an improved spectral decomposition method to examine earthquake source scaling in Southern California. *Journal of Geophysical Research: Solid Earth*, 122(4), 2890-2910.
- 7237 Kilgore, B., Beeler, N. M., Lozos, J. C., & Oglesby, D. D. (2017). Rock friction under variable normal stress. *Journal of Geophysical Research: Solid Earth*, 122(9), 7042-7075.
- 7239 Shinevar, W., Behn, M., & Hirth, G. (2015). Compositional dependence of lower crustal viscosity. *Geophysical Research Letters*, 42(20), 8333-8340.
- 7250 Hollingsworth, J., Ye, L., & Avouac, J. (2017). Dynamically triggered slip on a splay fault in the Mw 7.8, 2016 Kaikoura (New Zealand) earthquake. *Geophysical Research Letters*, 44.
- 7251 Bird, P. (2017). Stress field models from Maxwell stress functions: Southern California. *Geophysical Journal International*, 210, 951-963.
- 7261 Rubino, V., Lapusta, N., & Rosakis, A. J. (2017). Designing laboratory experiments of dynamic rupture triggering and low-prestress supershear transition. *Journal of Geophysical Research*, (in preparation).
- 7262 Rubino, V., Lapusta, N., & Rosakis, A. J. (2017). Experimental evidence of dynamic rupture triggering and low-prestress supershear transition. *Journal of Geophysical research*, (in preparation).
- 7263 Rubino, V., Rosakis, A. J., & Lapusta, N. (2017). Visualization of laboratory earthquakes using the digital image correlation technique. *Experimental Mechanics*, (in preparation).
- 7264 Rubino, V., Rosakis, A. J., & Lapusta, N. (2017). Investigation of ground motion attenuation of crack-like and pulse-like ruptures. *Tectonophysics*, (in preparation).
- 7265 Perry, S. M., & Lapusta, N. (2017). Reproducing magnitude-invariant stress drops in fault models with dynamic weakening. *Journal of Geophysical Research*, (in preparation).
- 7266 Abercrombie, R. E., Bannister, S. C., Ristau, J., & Doser, D. (2017). Variability of earthquake stress drop in a subduction setting, the Hikurangi Margin, New Zealand. *Geophysical Journal International*, 208(1), 306-320.
- 7269 Marzocchi, W., & Jordan, T. H. (2017). A Unified Probabilistic Framework for Seismic Hazard Analysis. *Bulletin of the Seismological Society of America*, 107(6), 2738-2744.
- 7271 Zhang, Q., Lin, G., Zhan, Z., Chen, X., Qin, Y., & Wdowinski, S. (2017). Absence of remote earthquake triggering within the Coso and Salton Sea geothermal production fields. *Geophysical Research Letters*, 44(2), 726-733.
- 7272 Allison, K. L., & Dunham, E. M. (2018). Earthquake cycle simulations with rate-and-state friction and power-law viscoelasticity. *Tectonophysics*, 733, 232-256.
- 7275 Tymofyeyeva, E., & Fialko, Y. (2018). Geodetic Evidence for a Blind Fault Segment at the Southern End of the San Jacinto Fault Zone. *Journal of Geophysical Research: Solid Earth*, 123(1), 878-891.
- 7276 Rockwell, T. K., Masana, E., Sharp, W. D., Stepancikova, P., Ferrater, M., & Mertz-Kraus, R. (2019). Late Quaternary slip rates for the southern Elsinore fault in the Coyote Mountains, southern California from analysis of alluvial fan landforms and clast provenance, soils, and U-series ages of pedogenic carbonate. *Geomorphology*, 326, 68-89.
- 7279 Field, E., Porter, K., & Milner, K. (2017). A Prototype Operational Earthquake Loss Model for California Based on UCERF3-ETAS – A First Look at Valuation. *Earthquake Spectra*, 33(4), 1279-1299.
- 7283 Giraldo, D., & Restrepo, D. (2017). The spectral cell method in nonlinear earthquake modeling. *Computational Mechanics*, 60(6), 883-903.

- 7285 Xu, X., Sandwell, D. T., Tymofyeyeva, E., Gonzalez-Ortega, A., & Tong, X. (2017). IEEE Transactions on Geoscience and Remote Sensing. Tectonic and Anthropogenic Deformation at the Cerro Prieto Geothermal Step-Over Revealed by Sentinel-1A InSAR, 1-9.
- 7287 Shi, J., & Asimaki, D. (2018). A Generic Velocity Profile for Basin Sediments in California Conditioned on VS30. *Seismological Research Letters*, 89(4), 1397-1409.
- 7289 Johnson, C. W., Fu, Y., & Bürgmann, R. (2017). Seasonal water storage, stress modulation, and California seismicity. *Science*, 356(6343), 1161-1164.
- 7291 Brantut, N., & Viesca, R. C. (2017). The fracture energy of ruptures driven by flash heating. *Geophysical Research Letters*, 44.
- 7292 Field, E. H., Jordan, T. H., Jones, L. M., Michael, A. J., & Blanpied, M. L. (2017). The potential uses of operational earthquake forecasting. *Seismological Research Letters*, 87(2a), 313-322.
- 7293 Goebel, T. H., Weingarten, M., Chen, X., Haffener, J., & Brodsky, E. E. (2017). The 2016 Mw5.1 Fairview, Oklahoma earthquakes: Evidence for long-range poroelastic triggering at >40 km from fluid disposal wells. *Earth and Planetary Science Letters*, 472, 50-61.
- 7294 Goebel, T. H., Walter, J. I., Murray, K., & Brodsky, E. E. (2017). Comment on “How will induced seismicity in Oklahoma respond to decreased saltwater injection rates?” by C. Langenbruch and M. D. Zoback. *Science Advances*, 3(8).
- 7299 Moyer, P. A., Boettcher, M. S., Ellsworth, W. L., Ogasawara, H., Cichowicz, A., Birch, D., & van Aswegen, G. (2017). Call for Models—A Test Case for the Source Inversion Validation: The 2014 ML 5.5 Orkney, South Africa, Earthquake. *Seismological Research Letters*, 88(5), 1333.
- 7300 Roten, D., Olsen, K. B., & Day, S. M. (2017). Off-fault deformations and shallow slip deficit from dynamic rupture simulations with fault zone plasticity. *Geophysical Research Letters*, 40, 1-10.
- 7303 Yu, E., Acharya, P., Jaramillo, J., Kientz, S., Thomas, V., & Hauksson, E. (2018). The Station Information System (SIS): A Centralized Seismic Station Repository for Populating, Managing, and Distributing Metadata. *Seismological Research Letters*, 89(1), 47-55.
- 7349 Yule, D., & Heermance, R. V. (2017). Holocene slip rates along the San Andreas Fault System in the San Geronio Pass and implications for large earthquakes in southern California. *Geophysical Research Letters*, 44(11), 5391-5400.
- 7365 Sheng, Y., Denolle, M. A., & Beroza, G. C. (2017). Multicomponent C3 Green's Functions for Improved Long-Period Ground-Motion Prediction. *Bulletin of the Seismological Society of America*, 107(6), 2836-2845.
- 7459 Bruhat, L., & Segall, P. (2017). Deformation rates in northern Cascadia consistent with slow updip propagation of deep interseismic creep. *Geophysical Journal International*, 211(1), 427-449.
- 7485 Anderson, J. G., Biasi, G. P., & Wesnousky, S. G. (2017). Fault-Scaling Relationships Depend on the Average Fault-Slip Rate. *Bulletin of the Seismological Society of America*, 107(6), 2561-2577.
- 7524 Tymofyeyeva, E., & Fialko, Y. (2017). Geodetic evidence for a blind fault segment at the Southern end of the San Jacinto Fault Zone. *Journal of Geophysical Research*, 123, 878–891.
- 7640 Persaud, P., Tan, E., Contreras, J., & Lavier, L. (2017). A bottom-driven mechanism for distributed faulting in the Gulf of California rift. *Tectonophysics*, 719-720, 51-65.
- 7884 Carlson, J. M., Elbanna, A. E., & Lieou, C. K. (2016). Dynamic friction in sheared fault gouge: Implications of acoustic vibration on triggering and slow slip. *Journal of Geophysical Research: Solid Earth*, 121(3), 1483-1496.
- 7895 Shahir, H., Pak, A., & Ayoubi, P. (2016). A performance-based approach for design of ground densification to mitigate liquefaction. *Soil Dynamics and Earthquake Engineering*, 90, 381-394.
- 7897 Ayoubi, P., & Pak, A. (2017). Liquefaction-induced settlement of shallow foundations on two-layered subsoil strata. *Soil Dynamics and Earthquake Engineering*, 94, 35-46.
- 7900 Saunders, J. K., Goldberg, D. E., Haase, J. S., Bock, Y., Offield, G., Melgar, D., Restrepo, J. I., Fleischman, R., Nema, A., Geng, J., Walls, C., Mann, D., & Mattioli, G. S. (2016). *Seismogeodesy*

- using GNSS and low-cost MEMS accelerometers: perspectives for earthquake early warning and rapid response. *Bulletin Seismological Society of America*, 106(6), 2469–2489.
- 7901 Goldberg, D. E., & Bock, Y. (2017). Self-contained local broadband seismogeodetic early warning system: Detection and location. *Journal of Geophysical Research Solid Earth*, 122.
- 7904 Avital, M., Kamai, R., Davis, M., & Dor, O. (2018). The Effect of Alternative Seismotectonic Models on PSHA Results – a Sensitivity Study for the Case of Israel. *Natural Hazards and Earth System Sciences*, 18, 499-514.
- 7911 Nie, S., Wang, Y., Olsen, K. B., & Day, S. M. (2017). Fourth-Order Staggered-Grid Finite-Difference Seismic Wavefield Estimation Using a Discontinuous Mesh Interface (WEDMI). *Bulletin of the Seismological Society of America*, 107(5), 2183-2193.
- 7914 Denolle, M. A., Boué, P., Hirata, N., & Beroza, G. C. (2018). Strong Shaking Predicted in Tokyo From an Expected M7+ Itoigawa-Shizuoka Earthquake. *Journal of Geophysical Research: Solid Earth*, 123(5), 3968-3992.
- 7915 Yoon, C., O'Reilly, O., Bergen, K., & Beroza, G. C. (2015). Earthquake detection through computationally efficient similarity search. *Science Advances*, 1(11), e1501057-e1501057.
- 7917 Li, Z., & Peng, Z. (2017). Stress- and Structure-Induced Anisotropy in Southern California From Two Decades of Shear Wave Splitting Measurements. *Geophysical Research Letters*, 44(19), 9607-9614.
- 7921 Resor, P. G., Cooke, M. L., Marshall, S. T., & Madden, E. H. (2018). Influence of Fault Geometry on the Spatial Distribution of Long-Term Slip with Implications for Determining Representative Fault-Slip Rates. *Bulletin of the Seismological Society of America*, 108(4), 1837-1852.
- 7927 Ray, S., & Viesca, R. C. (2017). Earthquake Nucleation on Faults With Heterogeneous Frictional Properties, Normal Stress. *Journal of Geophysical Research: Solid Earth*, 122(10), 8214-8240.
- 7934 Song, X., & Jordan, T. H. (2018). Effective-Medium Models of Inner-Core Anisotropy. *Journal of Geophysical Research: Solid Earth*, 123(7), 5793-5813.
- 7942 Reynolds, L. C., Simms, A. R., Rockwell, T. K., Yokoyama, Y., Miyairi, Y., & Hangsterfer, A. (2021). Sedimentary response of a microtidal estuary to coseismic subsidence. *Geological Society of America Bulletin*, (under review).
- 7946 Luo, Y., & Ampuero, J. (2018). Stability of faults with heterogeneous friction properties and effective normal stress. *Tectonophysics*, 733, 257-272.
- 7951 Muluneh, A. A., Kidane, T., Rowland, J., & Bachtadse, V. (2013). Counterclockwise block rotation linked to southward propagation and overlap of sub-aerial Red Sea Rift segments, Afar Depression: Insight from paleomagnetism. *Tectonophysics*, 593, 111-120.
- 7955 Bergen, K. J., & Beroza, G. C. (2018). Detecting Earthquakes over a Seismic Network using Single-Station Similarity Measures. *Geophysical Journal International*, 213(3), 1984–1998.
- 7960 Harris, R. A., Barall, M., Aagaard, B., Ma, S., Roten, D., Olsen, K., Duan, B., Luo, B., Liu, D., Bai, K., Ampuero, J., Kaneko, Y., Gabriel, A., Duru, K., Ulrich, T., Wollherr, S., Shi, Z., Dunham, E., Bydlon, S., Zhang, Z., Chen, X., Somala, S., Pelties, C., Tago, J., Cruz-Atienza, V., Kozdon, J., Daub, E., Aslam, K., Kase, Y., Withers, K., & Dalguer, L. (2018). A suite of exercises for verifying dynamic earthquake rupture codes. *Seismological Research Letters*, 89(3), 1146-1162.
- 7964 Bai, K., & Ampuero, J. (2017). Effect of Seismogenic Depth and Background Stress on Physical Limits of Earthquake Rupture Across Fault Step Overs. *Journal of Geophysical Research: Solid Earth*, 122(12), 10,280-10,298.
- 7965 Thomas, A., Beeler, N. M., Bletery, Q., Bürgmann, R., & Shelly, D. R. (2018). Using Low-Frequency Earthquake Families on the San Andreas Fault as Deep Creepmeters. *Journal of Geophysical Research: Solid Earth*, 123(1), 457-475.

- 7966 Davidge, L. C., Ebinger, C. J., Ruiz, M., Tepp, G., Amelung, F., Geist, D., Cote, D., & Anzieta, J. (2017). Seismicity patterns during a period of inflation at Sierra Negra volcano, Galápagos Ocean Island Chain. *Earth and Planetary Science Letters*, 462, 169-179.
- 7970 Rockwell, T. K., Meltzner, A. J., & Haaker, E. C. (2018). Dates of the Two Most Recent Surface Ruptures on the Southernmost San Andreas Fault Recalculated by Precise Dating of Lake Cahuilla Dry Periods. *Bulletin of the Seismological Society of America*, 108(5A), 2634-2649.
- 7972 Yu, C., Zhan, Z., Hauksson, E., & Cochran, E. S. (2017). Strong SH-to-Love Wave Scattering off the Southern California Continental Borderland. *Geophysical Research Letters*, 44(20), 10,208-10,215.
- 7973 Yadav, R., Swami, S., & SHANKER, P. (2017). Interference between two Adjacent Footings located in Seismic Region. *Geosciences*, 7(4)(2017), 129-140.
- 7975 Hatch, J. L., Cooke, M. L., & Marshall, S. T. (2018). Sensitivity of deformation to activity along the Mill Creek and Mission Creek strands of the southern San Andreas fault. *Geosphere*,.
- 7978 Onderdonk, N. W., Rockwell, T. K., McGill, S. F., & Marliyani, G. I. (2013). Evidence for Seven Surface Ruptures in the Past 1600 Years on the Claremont Fault at Mystic Lake, Northern San Jacinto Fault Zone, California. *Bulletin of the Seismological Society of America*, 103(1), 519-541.
- 7982 Sandwell, D. T., & Wessel, P. (2016). Interpolation of 2-D vector data using constraints from elasticity. *Geophysical Research Letters*, 43(20), 10,703-10,709.
- 7988 Hutchison, A. A., & Ghosh, A. (2017). Ambient tectonic tremor in the San Jacinto Fault, near the Anza Gap, detected by multiple mini seismic arrays. *Bulletin of the Seismological Society of America*, 107(5), 1985-1993.
- 7996 Sleep, N. H., & Olds, E. P. (2018). Remote faulting triggered by strong seismic waves from the Cretaceous-Paleogene asteroid impact. *Seismological Research Letters*, 89(2A), 570-576.
- 7999 Bijelic, N., Lin, T., & Deierlein, G. (2018). Validation of the SCEC Broadband Platform simulations for tall building risk assessments considering spectral shape and duration of the ground motion. *Earthquake Engineering and Structural Dynamics*, 47(11), 2233-2251.
- 8002 Lin, Y., & Jordan, T. H. (2018). Frequency-Dependent Attenuation of P and S Waves in Southern California. *Journal of Geophysical Research: Solid Earth*, 123(7), 5814-5830.
- 8006 Hammond, W. C., Burgette, R. J., Johnson, K. M., & Blewitt, G. (2017). Uplift of the Western Transverse Ranges and Ventura Area of Southern California: A Four-Technique Geodetic Study Combining GPS, InSAR, Leveling, and Tide Gauges. *Journal of Geophysical Research - Solid Earth*, 123.
- 8007 Sandwell, D. T., & Smith-Konter, B. R. (2018). Maxwell: A Semi-analytic 4D Code for Earthquake Cycle Modeling of Transform Fault Systems. *Computers and Geosciences*,.
- 8009 Taira, T., Nayak, A., Brenguier, F., & Manga, M. (2018). Monitoring reservoir response to earthquakes and fluid extraction, Salton Sea geothermal field, California. *Science Advances*, 4(1), e1701536.
- 8012 Rhoades, D. A., Christophersen, A., Gerstenberger, M. C., Liukis, M., Silva, F., Marzocchi, W., Werner, M. J., & Jordan, T. H. (2018). Highlights from the First Ten Years of the New Zealand Earthquake Forecast Testing Center. *Seismological Research Letters*, 89(4), 1229-1237.
- 8013 McGuire, J. J., & Kaneko, Y. (2018). Directly estimating earthquake rupture area using second moments to reduce the uncertainty in stress drop. *Geophysical Journal International*, 214(3), 2224-2235.
- 8014 Fan, W., & McGuire, J. J. (2018). Investigating microearthquake finite source attributes with IRIS Community Wavefield Demonstration Experiment in Oklahoma. *Geophysical Journal International*, 214(2), 1072-1087.

- 8015 Khoshnevis, N., & Taborda, R. (2018). Prioritizing Ground-Motion Validation Metrics Using Semisupervised and Supervised Learning. *Bulletin of the Seismological Society of America*, 108(4), 2248-2264.
- 8019 Bahadori, A., Holt, W. E., & Rasbury, E. (2018). Reconstruction modeling of crustal thickness and paleotopography of western North America since 36 Ma. *Geosphere*, 14(3), 1207-1231.
- 8021 Kraner, M. L., Holt, W. E., & Borsa, A. A. (2018). Seasonal Nontectonic Loading Inferred From cGPS as a Potential Trigger for the M6.0 South Napa Earthquake. *Journal of Geophysical Research: Solid Earth*, 123(6), 5300-5322.
- 8022 Taroni, M., Marzocchi, W., Schorlemmer, D., Werner, M. J., Wiemer, S., Zechar, J. D., Heiniger, L., & Euchner, F. (2018). Prospective CSEP Evaluation of 1-Day, 3-Month, and 5-Yr Earthquake Forecasts for Italy. *Seismological Research Letters*, 89(4), 1251-1261.
- 8025 Cheng, Y., & Chen, X. (2018). Characteristics of Seismicity inside and outside the Salton Sea Geothermal Field. *Bulletin of the Seismological Society of America*, 108(4), 1877-1888.
- 8033 Field, E. H., & Milner, K. R. (2018). Candidate Products for Operational Earthquake Forecasting Illustrated Using the HayWired Planning Scenario, Including One Very Quick (and Not-So-Dirty) Hazard-Map Option. *Seismological Research Letters*, 89(4), 1420-1434.
- 8036 Schorlemmer, D., Werner, M. J., Marzocchi, W., Jordan, T. H., Ogata, Y., Jackson, D. D., Mak, S., Rhoades, D. A., Gerstenberger, M. C., Hirata, N., Liukis, M., Maechling, P. J., Strader, A., Taroni, M., Wiemer, S., Zechar, J. D., & Zhuang, J. (2018). The Collaboratory for the Study of Earthquake Predictability: Achievements and Priorities. *Seismological Research Letters*, 89(4), 1305-1313.
- 8038 Bijelic, N., Lin, T., & Deierlein, G. (2018). Influence of high-frequency components of hybrid-broadband and deterministic CyberShake ground motion simulations on nonlinear response analyses of buildings. *Seismological Research Letters*, (under review).
- 8039 Bijelic, N., Lin, T., & Deierlein, G. G. (2019). Evaluation of Building Collapse Risk and Drift Demands by Nonlinear Structural Analyses Using Conventional Hazard Analysis versus Direct Simulation with CyberShake Seismograms. *Bulletin of the Seismological Society of America*, 109(5), 1812-1828.
- 8040 Bijelic, N., Lin, T., & Deierlein, G. (2020). Efficient intensity measures and machine learning algorithms for collapse prediction of tall buildings informed by SCEC CyberShake ground motion simulations. *Earthquake Spectra*, 36(3), 1188-1207.
- 8041 Bijelic, N., Lin, T., & Deierlein, G. (2019). Quantification of the Influence of Deep Basin Effects on Structural Collapse Using SCEC CyberShake Earthquake Ground Motion Simulations. *Earthquake Spectra*, 35(4), 1845–1864.
- 8042 Bijelic, N., Lin, T., & Deierlein, G. (2018). Duration and sustained amplitude adjusted response spectra – RSx and Da spectra. *Earthquake Spectra*, (in preparation).
- 8045 Cattania, C., Werner, M. J., Marzocchi, W., Hainzl, S., Rhoades, D., Gerstenberger, M., Liukis, M., Savran, W., Christophersen, A., Helmstetter, A., Jimenez, A., Steacy, S., & Jordan, T. H. (2018). The Forecasting Skill of Physics-Based Seismicity Models during the 2010–2012 Canterbury, New Zealand, Earthquake Sequence. *Seismological Research Letters*, 89(4), 1238-1250.
- 8048 Ahamed, S., Daub, E. G., & Choi, E. (2018). Coupling Long-Term Tectonic Loading with Short Term Earthquake Slip and Ground Motion. *Journal of Geophysical Research: Solid Earth*, (submitted).
- 8049 Strader, A., Werner, M., Bayona Viveros, J. A., Maechling, P., Silva, F., Liukis, M., & Schorlemmer, D. (2018). Prospective Evaluation of Global Earthquake Forecast Models: 2 Yrs of Observations Provide Preliminary Support for Merging Smoothed Seismicity with Geodetic Strain Rates. *Seismological Research Letters*, 89(4), 1262-1271.
- 8052 Jackson, D. D. (2018). Testing the Classic 1988 Forecast. *Seismological Research Letters*, 89(4), 1288-1297.

- 8054 Levy, Y., Rockwell, T. K., Shaw, J. H., Plesch, A., Driscoll, N. W., & Perea, H. (2019). Structural modeling of the Western Transverse Ranges: An imbricated thrust ramp architecture. *Lithosphere*, 11(6), 868-883.
- 8055 Philiposian, B., Fumal, T. E., & Weldon, R. J. (2011). San Andreas Fault Earthquake Chronology and Lake Cahuilla History at Coachella, California. *Bulletin of the Seismological Society of America*, 101(1), 13-38.
- 8057 Singleton, D. M., Rockwell, T. K., Murbach, D., Murbach, M., Maloney, J. M., Freeman, T., & Levy, Y. (2019). Late-Holocene Rupture History of the Rose Canyon Fault in Old Town, San Diego: Implications for Cascading Earthquakes on the Newport-Inglewood-Rose Canyon Fault System. *Bulletin of the Seismological Society of America*, 109(3), 855-874.
- 8066 Lin, Y., & Lapusta, N. (2018). Microseismicity simulated on asperity-like fault patches: on scaling of seismic moment with duration and seismological estimates of stress drops. *Geophysical Research Letters*, 45.
- 8068 Withers, K. B., Olsen, K. B., Day, S. M., & Shi, Z. (2018). Ground Motion and Intraevent Variability from 3D Deterministic Broadband (0–7.5 Hz) Simulations along a Nonplanar Strike-Slip Fault. *Bulletin of the Seismological Society of America*,.
- 8071 Withers, K. B., Olsen, K. B., Shi, Z., & Day, S. M. (2018). Validation of Deterministic Broadband Ground Motion and Variability from Dynamic Rupture Simulations of Buried Thrust Earthquakes. *Bulletin of the Seismological Society of America*,.
- 8073 Kagan, Y. Y. (2017). Earthquake number forecasts testing. *Geophysical Journal International*, 211(1), 335-345.
- 8075 Kagan, Y. Y., & Jackson, D. D. (2016). Earthquake rate and magnitude distributions of great earthquakes for use in global forecasts. *Geophysical Journal International*, 206(1), 630-643.
- 8079 Cooke, M. L., & Hatch, J. L. (2018). Off-Fault Focal Mechanisms Not Representative of Interseismic Fault Loading Suggest Deep Creep on the Northern San Jacinto Fault. *Geophysical Research Letters*, 45(17), 8976-8984.
- 8081 Bürgmann, R., Fu, Y., & Johnson, C. W. (2017). Stress Models of the Annual Hydrospheric, Atmospheric, Thermal, and Tidal Loading Cycles on California Faults: Perturbation of Background Stress and Changes in Seismicity. *Journal of Geophysical Research: Solid Earth*, 122(12), 10,605-10,625.
- 8083 Ruhl, C. J., Abercrombie, R. E., Smith, K. D., & Zaliapin, I. (2016). Complex spatiotemporal evolution of the 2008 Mw 4.9 Mogul earthquake swarm (Reno, Nevada): Interplay of fluid and faulting. *Journal of Geophysical Research: Solid Earth*, 121(11), 8196-8216.
- 8084 Martínez-Garzón, P., Zaliapin, I., Ben-Zion, Y., Kwiatek, G., & Bohnhoff, M. (2018). Comparative Study of Earthquake Clustering in Relation to Hydraulic Activities at Geothermal Fields in California. *Journal of Geophysical Research: Solid Earth*,.
- 8085 Hauksson, E., & Meier, M. (2018). Applying Depth Distribution of Seismicity to Determine Thermo-Mechanical Properties of the Seismogenic Crust in Southern California: Comparing Lithotectonic Blocks. *Pure and Applied Geophysics*, 176, 1061–1081.
- 8086 Michael, A. J., & Werner, M. J. (2018). Preface to the Focus Section on the Collaboratory for the Study of Earthquake Predictability (CSEP): New Results and Future Directions. *Seismological Research Letters*, 89(4), 1226-1228.
- 8093 Shaw, B. E., Milner, K. R., Field, E. H., Richards-Dinger, K., Gilchrist, J. J., Dieterich, J. H., & Jordan, T. H. (2018). A physics-based earthquake simulator replicates seismic hazard statistics across California. *Science Advances*, 4(8).
- 8101 Gheibi, A., & Hedayat, A. (2018). Ultrasonic investigation of granular materials subjected to compression and crushing. *Ultrasonics*, 87, 112-125.
- 8105 Miranda, E., & Stewart, C. (2017). The Rheological Evolution of Brittle-Ductile Transition Rocks During the Earthquake Cycle: Evidence for a Ductile Precursor to Pseudotachylite in an

- Extensional Fault System, South Mountains, Arizona. *Journal of Geophysical Research: Solid Earth*, 122(12), 10,643-10,665.
- 8106 Abolfathian, N., Martínez-Garzón, P., & Ben-Zion, Y. (2018). Spatiotemporal Variations of Stress and Strain Parameters in the San Jacinto Fault Zone. *Pure and Applied Geophysics*, 176(3), 1145-1168.
- 8107 Niu, F., Tsai, V. C., & Chen, H. (2018). Observations and modeling of long-period ground-motion amplification across northeast China. *Geophysical Research Letters*, .
- 8110 Abercrombie, R. E. (2015). Investigating uncertainties in empirical Green's function analysis of earthquake source parameters. *Journal of Geophysical Research: Solid Earth*, 120(6), 4263-4277.
- 8112 Bannister, S. C., Poli, P., & Abercrombie, R. E. (2017). Earthquake Directivity, Orientation, and Stress Drop Within the Subducting Plate at the Hikurangi Margin, New Zealand. *Journal of Geophysical Research: Solid Earth*, 122(12), 10,176-10,188.
- 8113 Zaliapin, I., Smith, K. D., Abercrombie, R. E., & Ruhl, C. J. (2016). Complex spatiotemporal evolution of the 2008 Mw 4.9 Mogul earthquake swarm (Reno, Nevada): Interplay of fluid and faulting. *Journal of Geophysical Research: Solid Earth*, 121(11), 8196-8216.
- 8114 Ruhl, C. J., Abercrombie, R. E., & Smith, K. D. (2017). Spatiotemporal Variation of Stress Drop During the 2008 Mogul, Nevada, Earthquake Swarm. *Journal of Geophysical Research: Solid Earth*, 122(10), 8163-8180.
- 8116 Shearer, P. M., & Wang, W. (2017). Using direct and coda wave envelopes to resolve the scattering and intrinsic attenuation structure of Southern California. *Journal of Geophysical Research: Solid Earth*, 122(9), 7236-7251.
- 8117 Shearer, P. M., & Trugman, D. T. (2018). Strong Correlation between Stress Drop and Peak Ground Acceleration for Recent M 1–4 Earthquakes in the San Francisco Bay Area. *Bulletin of the Seismological Society of America*, 108(2), 929-945.
- 8118 Trugman, D. T., & Shearer, P. M. (2017). GrowClust: A Hierarchical Clustering Algorithm for Relative Earthquake Relocation, with Application to the Spanish Springs and Sheldon, Nevada, Earthquake Sequences. *Seismological Research Letters*, 88(2A), 379-391.
- 8120 Shearer, P. M., & Sumiejski, L. E. (2012). Temporal Stability of Coda Q-1 in Southern California. *Bulletin of the Seismological Society of America*, 102(2), 873-877.
- 8121 Shearer, P. M., & Kaneko, Y. (2015). Variability of seismic source spectra, estimated stress drop, and radiated energy, derived from cohesive-zone models of symmetrical and asymmetrical circular and elliptical ruptures. *Journal of Geophysical Research: Solid Earth*, 120(2), 1053-1079.
- 8122 Shearer, P. M., & Chen, X. (2015). Analysis of Foreshock Sequences in California and Implications for Earthquake Triggering. *Pure and Applied Geophysics*, 173(1), 133-152.
- 8125 Kreemer, C., & Zaliapin, I. (2018). Spatiotemporal Correlation Between Seasonal Variations in Seismicity and Horizontal Dilatational Strain in California. *Geophysical Research Letters*, 45(18), 9559-9568.
- 8128 Perry, S. M., Lambert, V. R., & Lapusta, N. (2020). Nearly Magnitude-Invariant Stress Drops in Simulated Crack-Like Earthquake Sequences on Rate-and-State Faults with Thermal Pressurization of Pore Fluids. *Journal of Geophysical Research: Solid Earth*, 125(3).
- 8131 Marzocchi, W., & Jordan, T. H. (2018). Experimental concepts for testing probabilistic earthquake forecasting and seismic hazard models. *Geophysical Journal International*, 215(2), 780-798.
- 8132 Viesca, R. C., & Dublanchet, P. (2019). The slow slip of viscous faults. *Journal of Geophysical Research: Solid Earth*, 124.
- 8137 Li, Y., Catchings, R. D., & Goldman, M. R. (2019). Rupture Branching Structure of the 2014 Mw 6.0 South Napa, California Earthquake Inferred from Explosion-Generated Fault-Zone Trapped Waves. *Bulletin Seismological Society of America*, 109(5), 1907-1921.

- 8143 Kirkpatrick, J., & Shervais, K. A. (2016). Smoothing and re-roughening processes: The geometric evolution of a single fault zone. *Journal of Structural Geology*, 91, 130-143.
- 8145 Grant Ludwig, L., Akciz, S. O., Arrowsmith, J., & Salisbury, J. (2019). Reproducibility of San Andreas Fault Slip Rate Measurements at Wallace Creek in the Carrizo Plain, CA. *Earth and Space Science*, 6(1), 156-165.
- 8165 Johnson, K. M., Hammond, W., Burgette, R. J., Marshall, S. T., & Sorlien, C. (2018). Present-day and Long-term Uplift Across the Western Transverse Ranges of Southern California. *Journal of Geophysical Research--Solid Earth*,.
- 8204 Inbal, A., Cristea-Platon, T., Ampuero, J., Hillers, G., Agnew, D., & Hough, S. E. (2018). Sources of Long-Range Anthropogenic Noise in Southern California and Implications for Tectonic Tremor Detection. *Bulletin of the Seismological Society of America*,.
- 8217 Hearn, E. H. (2019). Kinematics of southern California crustal deformation: Insights from finite-element models. *Tectonophysics*, 758, 12-28.
- 8221 White, M. C., Reyes, J., Hollis, D. D., Barklage, M., Meng, H., Ross, Z. E., Vernon, F. L., Ozakin, Y., Zigone, D., & Ben-Zion, Y. (2015). Basic data features and results from a spatially dense seismic array on the San Jacinto fault zone. *Geophysical Journal International*, 202(1), 370-380.
- 8224 Teng, G., & Baker, J. W. (2018). Evaluation of CyberShake Ground Motions for Engineering Practice. *Earthquake Spectra*, (in preparation).
- 8225 Chen, Y., & Baker, J. W. (2018). Spatial correlations in CyberShake physics-based ground motion simulations. *Seismological Research Letters*, (in preparation).
- 8242 González-García, J., Gonzalez-Ortega, A., & Sandwell, D. T. (2018). Interseismic Velocity Field and Seismic Moment Release in Northern Baja California, Mexico. *Seismological Research Letters*, 89(2A), 526-533.
- 8243 Xu, X., Basset, D., & Sandwell, D. T. (2017). A spectral expansion approach for geodetic slip inversion: implications for the downdip rupture limits of oceanic and continental megathrust earthquakes. *Geophysical Journal International*, 212(1), 400-411.
- 8266 Liu, G., Persaud, P., & Clayton, R. W. (2018). Structure of the Northern Los Angeles Basins Revealed in Teleseismic Receiver Functions from Short-term Nodal Seismic Arrays. *Seismological Research Letters*,.
- 8267 Persaud, P., Pritchard, E. H., & Stock, J. M. (2020). Scales of Stress Heterogeneity Near Active Faults in the Santa Barbara Channel, Southern California. *Geochemistry, Geophysics, Geosystems*, 21(1).
- 8269 Ajala, R., Persaud, P., Stock, J. M., Fuis, G. S., Hole, J. A., Goldman, M., & Scheirer, D. (2019). Three-Dimensional Basin and Fault Structure From a Detailed Seismic Velocity Model of Coachella Valley, Southern California. *Journal of Geophysical Research: Solid Earth*,.
- 8350 Cooper, F. J., Behr, W. M., & Platt, J. P. (2015). Metamorphic core complexes: windows into the mechanics and rheology of the crust. *Journal of the Geological Society*, 172(1), 9-27.
- 8352 Passchier, C. W., & Platt, J. P. (2016). Zipper junctions: A new approach to the intersections of conjugate strike-slip faults. *Geology*, 44(10), 795-798.
- 8353 Platt, J. P., & Passchier, C. W. (2017). Shear zone junctions: Of zippers and freeways. *Journal of Structural Geology*, 95, 188-202.
- 8355 Behr, W. M., Platt, J. P., & Cooper, F. J. (2017). Rheological transitions in the middle crust: insights from Cordilleran metamorphic core complexes. *Solid Earth*, 8(1), 199-215.
- 8356 Platt, J. P., & Xia, H. (2017). Structural and rheological evolution of the Laramide subduction channel in southern California. *Solid Earth*, 8(2), 379-403.
- 8357 Platt, J. P., & De Bresser, J. (2017). Stress dependence of microstructures in experimentally deformed calcite. *Journal of Structural Geology*, 105, 80-87.

- 8845 Ghahari, F., Abazarsa, F., Jeong, C., Kurtulus, A., & Taciroglu, E. (2018). Blind identification of site effects and bedrock motion from surface response signals. *Soil Dynamics and Earthquake Engineering*, 107, 322-331.
- 8846 Shirzad-Ghaleroudkhani, N., Mahsuli, M., Ghahari, F., & Taciroglu, E. (2017). Bayesian identification of soil-foundation stiffness of building structures. *Structural Control and Health Monitoring*, 25(3).
- 8850 Field, E. H. (2018). Improving Earthquake Rupture Forecasts Using California as a Guide. *Seismological Research Letters*, 89(6), 2337-2346.
- 8857 Wills, C. J., Gutierrez, C., Perez, F. G., & Branum, D. (2015). A Next Generation VS30 Map for California Based on Geology and Topography. *Bulletin of the Seismological Society of America*, 105(6), 3083-3091.
- 8858 Kamai, R., Silva, W. J., & Abrahamson, N. A. (2014). Summary of the ASK14 Ground Motion Relation for Active Crustal Regions. *Earthquake Spectra*, 30(3), 1025-1055.
- 8860 Atkinson, G. M., Seyhan, E., Stewart, J. P., & Boore, D. M. (2014). NGA-West2 Equations for Predicting PGA, PGV, and 5% Damped PSA for Shallow Crustal Earthquakes. *Earthquake Spectra*, 30(3), 1057-1085.
- 8861 Bozorgnia, Y., & Campbell, K. W. (2014). NGA-West2 Ground Motion Model for the Average Horizontal Components of PGA, PGV, and 5% Damped Linear Acceleration Response Spectra. *Earthquake Spectra*, 30(3), 1087-1115.
- 8862 Youngs, R. R., & Chiou, B. (2008). An NGA Model for the Average Horizontal Component of Peak Ground Motion and Response Spectra. *Earthquake Spectra*, 24(1), 173-215.
- 8863 Roten, D., Olsen, K. B., Day, S. M., & Cui, Y. (2017). Quantification of Fault-Zone Plasticity Effects with Spontaneous Rupture Simulations. *Pure and Applied Geophysics*, 174(9), 3369-3391.
- 8864 Daub, E. G., & Aslam, K. S. (2018). Effect of Fault Roughness on Aftershock Distribution: Elastic Off-Fault Material Properties. *Journal of Geophysical Research: Solid Earth*,.
- 8875 Heimisson, E. R., Dunham, E. M., & Almquist, M. (2019). Poroelastic effects destabilize mildly rate-strengthening friction to generate stable slow slip pulses. *Journal of The Mechanics and Physics of Solids*,.
- 8882 French, M. E., & Chester, J. S. (2018). Localized Slip and Associated Fluidized Structures Record Seismic Slip in Clay-Rich Fault Gouge. *Journal of Geophysical Research: Solid Earth*, 123(10), 8568-8588.
- 8883 Hall, C. M., Webb, H. N., Girty, G. H., Allam, A. A., & Rockwell, T. K. (2019). A case study of a precariously balanced rock, its partially exhumed corestone platform, and encasing saprock and soil. *CATENA*, 172, 719-737.
- 8885 Zhang, L., Werner, M. J., & Goda, K. (2018). Spatiotemporal Seismic Hazard and Risk Assessment of Aftershocks of M9 Mega-Thrust Earthquakes. *Bulletin of the Seismological Society of America*, 108(6), 3313-3335.
- 8887 Jordan, T. H., & Juarez, A. (2018). Representation of Complex Seismic Sources by Orthogonal Moment-Tensor Fields. *Geophysical Journal International*,.
- 8889 Kyriakopoulos, C., Oglesby, D. D., Rockwell, T. K., Meltzner, A. J., Barall, M., Fletcher, J. M., & Tulanowski, D. (2019). Dynamic rupture scenarios in the Brawley seismic zone, Salton Trough, southern California.. *Journal of Geophysical Research, Solid Earth*,.
- 8891 Zhang, W., Yu, X., Wang, M., & Zheng, A. (2017). Source rupture process of the 2016 Kaikoura, New Zealand earthquake estimated from the kinematic waveform inversion of strong-motion data. *Geophysical Journal International*, 212(3), 1736-1746.
- 8898 Witkosky, R. A., Stock, J. M., Tratt, D. M., Buckland, K. N., Adams, P. M., Johnson, P. D., Lynch, D. K., & Sousa, F. J. (2020). The Lavic Lake Fault: A Long-Term Cumulative Slip Analysis via

- Combined Field Work and Thermal Infrared Hyperspectral Airborne Remote Sensing. *Remote Sensing*, 12(21).
- 8901 Hughes, A., Rood, D. H., Whittaker, A. C., Bell, R., Rockwell, T. K., Levy, Y., Wilcken, K. M., Corbett, L. B., Bierman, P. R., DeVecchio, D. E., Marshall, S. T., Gurrola, L. D., & Nicholson, C. (2018). Geomorphic evidence for the geometry and slip rate of a young, low-angle thrust fault: Implications for hazard assessment and fault interaction in complex tectonic environments. *Earth and Planetary Science Letters*, 504, 198-210.
- 8904 Huang, Y. (2018). Earthquake Rupture in Fault Zones With Along-Strike Material Heterogeneity. *Journal of Geophysical Research: Solid Earth*,.
- 8905 Gori, M., Rubino, V., Rosakis, A. J., & Lapusta, N. (2018). Pressure shock fronts formed by ultra-fast shear cracks in viscoelastic materials. *Nature Communications*, 9(1).
- 8909 Fang, H., Yao, H., Zhang, H., Thurber, C., Ben-Zion, Y., & van der Hilst, R. (2018). Vp/Vs tomography in the southern California plate boundary region using body- and surface-wave traveltimes. *Geophysical Journal International*,.
- 8916 Shearer, P. M., Abercrombie, R. E., Trugman, D. T., & Wang, W. (2018). Comparing EGF Methods for Estimating Corner Frequency and Stress Drop from P-wave Spectra. *Journal of Geophysical Research*, (accepted).
- 8918 Milliner, C. W., Materna, K., Bürgmann, R., Fu, Y., Bekaert, D., Moore, A. W., Adhikari, S., & Argus, D. F. (2018). Tracking the weight of Hurricane Harvey's stormwater using GPS data. *Science Advances*, 4(9).
- 8919 Lin, G. (2019). Spatiotemporal variations of in situ Vp/Vs ratio within the Salton Sea Geothermal Field, southern California. *Geothermics*,.
- 8922 Berg, E., Lin, F., Allam, A. A., Qiu, H., Shen, W., & Ben-Zion, Y. (2018). Tomography of Southern California Via Bayesian Joint Inversion of Rayleigh Wave Ellipticity and Phase Velocity From Ambient Noise Cross-Correlations. *Journal of Geophysical Research: Solid Earth*,.
- 8924 Xu, X., Ward, L., Jiang, J., Smith-Konter, B. R., Tymofeyeva, E., Lindsey, E. O., Sylvester, A. G., & Sandwell, D. T. (2018). Surface Creep Rate of the Southern San Andreas Fault Modulated by Stress Perturbations From Nearby Large Events. *Geophysical Research Letters*, 45(19), 10,259-10,268.
- 8927 Crempien, J. G., & Archuleta, R. J. (2017). Within-Event and Between-Events Ground Motion Variability from Earthquake Rupture Scenarios. *Pure and Applied Geophysics*, 174(9), 3451-3465.
- 8928 Archuleta, R. J., & Crempien, J. G. (2015). UCSB Method for Simulation of Broadband Ground Motion from Kinematic Earthquake Sources. *Seismological Research Letters*, 86(1), 61-67.
- 8929 Platt, J. P., Xia, H., & Schmidt, W. (2018). Rheology and stress in subduction zones around the aseismic/seismic transition. *Progress in Earth and Planetary Science*, 5(1).
- 8931 Benz, H., Herrmann, R. B., Trugman, D. T., Shearer, P. M., Yeck, W. L., Burlacu, R., Pankow, K. L., Pechmann, J., Hale, J., & Koper, K. (2018). Afterslip Enhanced Aftershock Activity During the 2017 Earthquake Sequence Near Sulphur Peak, Idaho. *Geophysical Research Letters*, 45(11), 5352-5361.
- 8932 Trugman, D. T., Dougherty, S. L., Cochran, E. S., & Shearer, P. M. (2017). Source Spectral Properties of Small to Moderate Earthquakes in Southern Kansas. *Journal of Geophysical Research: Solid Earth*, 122(10), 8021-8034.
- 8944 Shinevar, W. J., Behn, M. D., Hirth, G., & Jagoutz, O. (2018). Inferring crustal viscosity from seismic velocity: Application to the lower crust of Southern California. *Earth and Planetary Science Letters*, 494, 83-91.
- 8945 Khoshnevis, N., & Taborda, R. (2019). Application of Pool-Based Active Learning in Physics-Based Earthquake Ground-Motion Simulation. *Seismological Research Letters*,.

- 8949 Fosdick, J. C., & Blisniuk, K. D. (2018). Sedimentary signals of recent faulting along an old strand of the San Andreas Fault, USA. *Scientific Reports*, 8(1).
- 8961 Kettlely, T., Verdon, J., Werner, M. J., Kendall, J., & Budge, J. (2019). Investigating the role of elastostatic stress transfer during hydraulic fracturing-induced fault activation. *Geophysical Journal International*,.
- 8965 Wang, W., & Shearer, P. M. (2018). An Improved Method to Determine Coda-Q, Earthquake Magnitude and Site Amplification: Theory and Application to Southern California. *Journal of Geophysical Research: Solid Earth*, (accepted).
- 8971 Yoon, C., Bergen, K., Rong, K., Elezabi, H., Ellsworth, W. L., Beroza, G. C., Bailis, P., & Levis, P. (2018). Unsupervised large-scale data mining for similar earthquake detection. *Bulletin of the Seismological Society of America*, (in preparation).
- 8972 Schaal, N., & Lapusta, N. (2019). Microseismicity on Patches of Higher Compression During Larger-Scale Earthquake Nucleation in a Rate-and-State Fault Model. *Journal of Geophysical Research: Solid Earth*, 124(2), 1962-1990.
- 8974 Kameshwar, S., Cox, D. T., Barbosa, A. R., Farokhnia, K., Park, H., Alam, M. S., & van de Lindt, J. W. (2019). Probabilistic decision-support framework for community resilience: Incorporating multi-hazards, infrastructure interdependencies, and resilience goals in a Bayesian network. *Reliability Engineering & System Safety*, 191.
- 8978 Danré, P., Yin, J., Lipovsky, B. P., & Denolle, M. A. (2019). Earthquakes Within Earthquakes: Patterns in Rupture Complexity. *Geophysical Research Letters*, 46(13), 7352-7360.
- 8981 Tung, S., & Masterlark, T. (2018). Sensitivities of Near-field Tsunami Forecasts to Megathrust Deformation Predictions. *Journal of Geophysical Research: Solid Earth*, 123(2), 1711-1735.
- 8985 Hu, F., Xu, J., Zhang, Z., Zhang, W., & Chen, X. (2014). Construction of equivalent single planar fault model for strike-slip stepovers. *Tectonophysics*, 632(2014), 244-249.
- 8986 Hu, F., Zhang, Z., & Chen, X. (2016). Investigation of earthquake jump distance for strike-slip step overs based on 3-D dynamic rupture simulations in an elastic half-space. *Journal of Geophysical Research: Solid Earth*, 121(2), 994-1006.
- 8987 Field, E. H. (2019). How Physics-Based Earthquake Simulators Might Help Improve Earthquake Forecasts. *Seismological Research Letters*,.
- 8988 Aslam, K. (2018). Effect of fault roughness on aftershock distribution: Plastic off-fault material properties. *Journal of Geophysical Research*, (in preparation).
- 8995 Sleep, N. H. (2019). Thermal Weakening of Asperity Tips on Fault Planes at High Sliding Velocities. *Geochemistry, Geophysics, Geosystems*, 20(2), 1164-1188.
- 8999 Cattania, C., & Segall, P. (2019). Crack Models of Repeating Earthquakes Predict Observed Moment-Recurrence Scaling. *Journal of Geophysical Research: Solid Earth*, 124(1), 476-503.
- 9000 Maurer, J. L., Johnson, K. M., & Segall, P. (2018). Bounding the Moment Deficit Rate on Crustal Faults Using Geodetic Data: Application to Southern California. *Journal of Geophysical Research: Solid Earth*,.
- 9008 Eymold, W. K., & Jordan, T. H. (2019). Tectonic regionalization of the Southern California crust from tomographic cluster analysis. *Journal of Geophysical Research*, 124.
- 9010 Dorsett, J. H., Madden, E. H., Marshall, S. T., & Cooke, M. L. (2019). Mechanical Models Suggest Fault Linkage through the Imperial Valley, California, U.S.A.. *Bulletin of the Seismological Society of America*, 109(4), 1217-1234.
- 9014 Wang, Y., Day, S. M., & Denolle, M. A. (2019). Geometric Controls on Pulse-Like Rupture in a Dynamic Model of the 2015 Gorkha Earthquake. *Journal of Geophysical Research: Solid Earth*,.
- 9015 Mancini, S., Segou, M., Werner, M. J., & Cattania, C. (2019). Improving Physics-Based Aftershock Forecasts During the 2016–2017 Central Italy Earthquake Cascade. *Journal of Geophysical Research: Solid Earth*, 124, 8626-8643.

- 9021 Ma, X., & Elbanna, A. (2019). Dynamic rupture propagation on fault planes with explicit representation of short branches. *Earth and Planetary Science Letters*, 523.
- 9023 Li, J. D., Rude, C. M., Blair, D. M., Gowanlock, M. G., Herring, T. A., & Pankratius, V. (2016). Computer aided detection of transient inflation events at Alaskan volcanoes using GPS measurements from 2005–2015. *Journal of Volcanology and Geothermal Research*, 327, 634-642.
- 9038 Wu, Q., Chen, X., & Abercrombie, R. E. (2019). Source Complexity of the 2015 Mw 4.0 Guthrie, Oklahoma Earthquake. *Geophysical Research Letters*, 46(9), 4674-4684.
- 9046 Zhu, L., Peng, Z., McClellan, J., Li, C., Yao, D., Li, Z., & Fang, L. (2019). Deep learning for seismic phase detection and picking in the aftershock zone of 2008 Mw7.9 Wenchuan Earthquake. *Physics of the Earth and Planetary Interiors*, (accepted).
- 9052 Nie, S., Anthony, D., & Ma, S. (2019). Testing the Amplitude of the Deconvolution-Based Ambient-Field Green's Functions by 3D Simulations of Elastic Wave Propagation in Sedimentary Basins. *Journal of Geophysical Research: Solid Earth*, 124.
- 9057 Evans, W. S., Plesch, A., Shaw, J. H., Pillai, N. L., Yu, E., Meier, M., & Hauksson, E. (2020). A Statistical Method for Associating Earthquakes with Their Source Faults in Southern California. *Bulletin of the Seismological Society of America*, 110(1), 213-225.
- 9058 Lambert, V. R., Lapusta, N., & Perry, S. M. (2019). Connecting seismological estimates of radiation efficiency with the rupture style of large earthquakes. *Journal of Geophysical Research*, (in preparation).
- 9066 Erickson, B. A., Jiang, J., Barall, M., Lapusta, N., Dunham, E. M., Harris, R. A., Abrahams, L. S., Allison, K. L., Ampuero, J., Barbot, S. D., Cattania, C., Elbanna, A. E., Fialko, Y., Idini, B., Kozdon, J. E., Lambert, V. R., Liu, Y., Luo, Y., Ma, X., Best Mckay, M., Segall, P., Shi, P., van den Ende, M., & Wei, M. (2020). The Community Code Verification Exercise for Simulating Sequences of Earthquakes and Aseismic Slip (SEAS). *Seismological Research Letters*, 91(2A), 874-890.
- 9067 Tal, Y., Rubino, V., Rosakis, A. J., & Lapusta, N. (2019). Enhanced Digital Image Correlation Analysis of Ruptures with Enforced Traction Continuity Conditions Across Interfaces. *Applied Sciences*, 9(8), 1625.
- 9069 Bhattacharya, P., & Viesca, R. C. (2019). Fluid-induced aseismic fault slip outpaces pore-fluid migration. *Science*, 364(6439), 464-468.
- 9070 Liu, D., & Duan, B. (2019). A 3D Finite Element Dynamic Earthquake Simulator for Multicycle Dynamics of Geometrically Complex Faults Governed by Rate- and State-Dependent Friction. *Geophysical Journal International*, (in preparation).
- 9073 Share, P., Allam, A. A., Ben-Zion, Y., Lin, F., & Vernon, F. L. (2018). Structural Properties of the San Jacinto Fault Zone at Blackburn Saddle from Seismic Data of a Dense Linear Array. *Pure and Applied Geophysics*, 176(3), 1169-1191.
- 9074 Li, J., Lin, F., Allam, A. A., Ben-Zion, Y., Liu, Z., & Schuster, G. (2019). Wave equation dispersion inversion of surface waves recorded on irregular topography. *Geophysical Journal International*, 217(1), 346-360.
- 9076 Hatch, J. L., Cooke, M. L., Stern, A. R., Douilly, R., & Oglesby, D. D. (2020). Considering fault interaction in estimates of absolute stress along faults in the San Gorgonio Pass region, southern California. *Geosphere*, 16(3), 751-764.
- 9081 Zhang, L., Werner, M. J., & Goda, K. (2020). Variability of ETAS Parameters in Global Subduction Zones and Applications to Mainshock–Aftershock Hazard Assessment. *Bulletin of the Seismological Society of America*, 110(1), 191-212.
- 9085 Fattaruso, L. A., Cooke, M. L., & Dorsey, R. J. (2014). Sensitivity of uplift patterns to dip of the San Andreas fault in the Coachella Valley, California. *Geosphere*, 10(6), 1235-1246.

- 9086 Hardebeck, J. L., & Michael, A. J. (2006). Damped regional-scale stress inversions: Methodology and examples for southern California and the Coalinga aftershock sequence. *Journal of Geophysical Research: Solid Earth*, 111(B11).
- 9087 Zeng, X., & Thurber, C. (2019). Three-dimensional shear wave velocity structure revealed with ambient noise tomography in the Parkfield, California region. *Physics of the Earth and Planetary Interiors*, 292, 67-75.
- 9088 Blanton, C. M., Rockwell, T. K., & Gontz, A. M. (2019). Refining the Spatial and Temporal Signatures of Creep and Co-Seismic Slip Along the Southern San Andreas Fault Using Very High Resolution SfM Imagery, Coachella Valley, California. *Geomorphology*, (in preparation).
- 9091 Pertou, M., Spica, Z., Clayton, R., & Beroza, G. (2019). Shear wave structure of a transect of the Los Angeles basin from multimode surface waves and H/V spectral ratio analysis. *Geophysical Journal International*, 220(1), 415-427.
- 9097 Liu, Z., & Bird, P. (2008). Kinematic modelling of neotectonics in the Persia-Tibet-Burma Orogen. *Geophysical Journal International*, 172(2), 779-797.
- 9205 Best Mckay, M., Erickson, B., & Kozdon, J. (2019). A computational method for earthquake cycles within anisotropic media. *Geophysical Journal International*, 219(2), 816-833.
- 9206 Kyriakopoulos, C., Oglesby, D. D., Funning, G., & Ryan, K. J. (2017). Dynamic Rupture Modeling of the M7.2 2010 El Mayor-Cucapah Earthquake: Comparison With a Geodetic Model. *Journal of Geophysical Research: Solid Earth*, 122(12), 10,263-10,279.
- 9211 Duru, K., Dunham, E., Allison, K., & Rivet, M. (2019). Dynamic rupture and earthquake sequence simulations using the wave equation in second-order form. *Geophysical Journal International*, 219(2), 796-815.
- 9223 O'Reilly, O., & Petersson, N. (2020). Energy conservative SBP discretizations of the acoustic wave equation in covariant form on staggered curvilinear grids. *Journal of Computational Physics*, 411.
- 9225 Kyriakopoulos, C. (2019). 3D Printing: A Remedy to Common Misconceptions about Earthquakes. *Seismological Research Letters*,.
- 9240 Gold, P. O., Behr, W. M., Fletcher, J. M., Rockwell, T. K., & Figueiredo, P. M. (2020). Time-Invariant Late Quaternary Slip Rates Along the Agua Blanca Fault, Northern Baja California, Mexico. *Tectonics*, 39(9).
- 9278 Qiu, H., Ben-Zion, Y., Ross, Z. E., Share, P., & Vernon, F. L. (2017). Internal structure of the San Jacinto fault zone at Jackass Flat from data recorded by a dense linear array. *Geophysical Journal International*, 209(3), 1369-1388.
- 9289 Bayona Viveros, J. A., von Specht, S., Strader, A., Hainzl, S., Cotton, F., & Schorlemmer, D. (2019). A Regionalized Seismicity Model for Subduction Zones Based on Geodetic Strain Rates, Geomechanical Parameters, and Earthquake-Catalog Data. *Bulletin of the Seismological Society of America*,.
- 9344 Sleep, N. H. (2019). Friction in Cold Ice within Outer Solar System Satellites with Reference to Thermal Weakening at High Sliding Velocities. *Journal of Geophysical Research - Planets*, (accepted).
- 9380 Rollins, C., & Avouac, J. (2019). A Geodesy- and Seismicity-Based Local Earthquake Likelihood Model for Central Los Angeles. *Geophysical Research Letters*, 46(6), 3153-3162.
- 9930 Ray, S., & Viesca, R. C. (2019). Homogenization of fault frictional properties. *Geophysical Journal International*, 219(2), 1203-1211.
- 9931 Zhu, W., Allison, K. L., Dunham, E. M., & Yang, Y. (2020). Fault valving and pore pressure evolution in simulations of earthquake sequences and aseismic slip. *Nature Communications*, 11(1).

- 9932 Wang, N. (2019). Broadband Ground-Motion Simulation with Inter-Frequency Correlations. *Bull. Seis. Soc. Am.*, (accepted).
- 9933 Lin, J. C., Moon, S., Yong, A., Meng, L., & Davis, P. M. (2019). Length-Scale-Dependent Relationships between VS30 and Topographic Slopes in Southern California. *Bulletin of the Seismological Society of America*,.
- 9935 Bruhat, L. (2019). A physics-based approach of deep interseismic creep for viscoelastic strike-slip earthquake cycle models. *Geophysical Journal International*,.
- 9936 Savran, W. H., & Olsen, K. B. (2019). Ground motion simulation and validation of the 2008 Chino Hills earthquake in scattering media. *Geophysical Journal International*, 219(3), 1836-1850.
- 9937 Milner, K. R., Field, E. H., Savran, W. H., Page, M. T., & Jordan, T. H. (2020). Operational Earthquake Forecasting during the 2019 Ridgecrest, California, Earthquake Sequence with the UCERF3-ETAS Model. *Seismological Research Letters*, 91(3), 1567-1578.
- 9941 Badt, N. Z., Tullis, T. E., Hirth, G., & Goldsby, D. L. (2020). Thermal Pressurization Weakening in Laboratory Experiments. *Journal of Geophysical Research: Solid Earth*, 125(5).
- 9944 Clayton, R. W., Persaud, P., Denolle, M. A., & Polet, J. (2019). Exposing Los Angeles's Shaky Geologic Underbelly. *Eos*, 100.
- 9945 Rubino, V., Rosakis, A. J., & Lapusta, N. (2019). Spatiotemporal properties of sub-Rayleigh and supershear ruptures inferred from full-field dynamic imaging of laboratory experiments. *Journal of Geophysics Research*, (in preparation).
- 9952 Bhattacharya, P., Rubin, A. M., Tullis, T. E., Beeler, N. M., & Okazaki, K. (2019). Where did the time go? The remarkable slip-sensitivity of friction at near-zero slip rates. *Proceedings of the National Academy of Sciences*, (in preparation).
- 9955 Sleep, N. H., & Nakata, N. (2019). Nonlinear Rheology at Shallow Depths with Reference to the 2016 Kumamoto Earthquakes. *Bulletin of the Seismological Society of America*, 109(6), 2674-2690.
- 9956 Ross, Z. E., Idini, B., Jia, Z., Stephenson, O., Zhong, M., Wang, X., Zhan, Z., Simons, M., Fielding, E. J., Yun, S., Hauksson, E., Moore, A. W., Liu, Z., & Jung, J. (2019). Hierarchical interlocked orthogonal faulting in the 2019 Ridgecrest earthquake sequence. *Science*, 366(6463), 346-351.
- 9959 Sleep, N. H., & Liu, T. (2020). Nonlinear Suppression of High-Frequency S Waves by the Near-Field Velocity Pulse With Reference to the 2002 Denali Earthquake. *Journal of Geophysical Research: Solid Earth*, 125(1).
- 9960 Sleep, N. H. (2019). Nonlinear interaction of high-frequency seismic waves with sliding fault planes. *Geophysical Research - Solid Earth*,.
- 9965 Burgette, R. J., Hanson, A. M., Scharer, K. M., Rittenour, T. M., & McPhillips, D. (2020). Late Quaternary slip rate of the Central Sierra Madre fault, southern California: Implications for slip partitioning and earthquake hazard. *Earth and Planetary Science Letters*, 530.
- 9966 Maurer, J. L., Segall, P., & Bradley, A. M. (2017). Bounding the moment deficit rate on crustal faults using geodetic data: Methods. *Journal of Geophysical Research: Solid Earth*, 122(8), 6811-6835.
- 9967 Tanimoto, T., & Wang, J. (2018). Low-Frequency Seismic Noise Characteristics From the Analysis of Co-Located Seismic and Pressure Data. *Journal of Geophysical Research: Solid Earth*, 123(7), 5853-5885.
- 9968 Tanimoto, T., & Wang, J. (2019). Theory for deriving shallow elasticity structure from co-located seismic and pressure data. *Journal of Geophysical Research: Solid Earth*,.
- 9969 Tal, Y., Hager, B. H., & Ampuero, J. (2018). The Effects of Fault Roughness on the Earthquake Nucleation Process. *Journal of Geophysical Research: Solid Earth*, 123(1), 437-456.

- 9970 Tal, Y., & Hager, B. H. (2018). The Slip Behavior and Source Parameters for Spontaneous Slip Events on Rough Faults Subjected to Slow Tectonic Loading. *Journal of Geophysical Research: Solid Earth*, 123(2), 1810-1823.
- 9973 Tal, Y., & Hager, B. H. (2017). Dynamic mortar finite element method for modeling of shear rupture on frictional rough surfaces. *Computational Mechanics*, 61(6), 699-716.
- 9983 Coffey, G. L., Savage, H. M., Polissar, P. J., Rowe, C. D., & Rabinowitz, H. S. (2019). Hot on the trail: Coseismic heating on a localized structure along the Muddy Mountain fault, Nevada. *Journal of Structural Geology*, 120, 67-79.
- 9984 Savage, H. M., & Polissar, P. J. (2019). Biomarker Thermal Maturity Reveals Localized Temperature Rise From Paleoseismic Slip Along the Punchbowl Fault, CA, USA. *Geochemistry, Geophysics, Geosystems*,.
- 9985 Fan, Z., Eichhubl, P., & Newell, P. (2019). Basement Fault Reactivation by Fluid Injection Into Sedimentary Reservoirs: Poroelastic Effects. *Journal of Geophysical Research: Solid Earth*, 124(7), 7354-7369.
- 9990 Nayak, A., & Thurber, C. H. (2020). Using multicomponent ambient seismic noise cross-correlations to identify higher mode Rayleigh waves and improve dispersion measurements. *Geophysical Journal International*, 222(3), 1590-1605.
- 9994 Shen, Z., & Liu, Z. (2020). Integration of GPS and InSAR Data for Resolving 3-Dimensional Crustal Deformation. *Earth and Space Science*, 7(4).
- 9995 Floyd, M., Funning, G., Fialko, Y., Terry, R., & Herring, T. (2020). Survey and Continuous GNSS in the Vicinity of the July 2019 Ridgecrest Earthquakes. *Seismological Research Letters*, 91(4), 2047-2054.
- 9997 Jordan, T. H., & Juarez, A. (2020). Erratum: 'Representation of complex seismic sources by orthogonal moment-tensor fields'. *Geophysical Journal International*, 222(2), 1333-1338.
- 9998 Rosakis, A. J., Rubino, V., & Lapusta, N. (2020). Recent Milestones in Unraveling the Full-Field Structure of Dynamic Shear Cracks and Fault Ruptures in Real-Time: From Photoelasticity to Ultrahigh-Speed Digital Image Correlation. *Journal of Applied Mechanics*, 87(3).
- 10001 McGill, S. F., Owen, L. A., Weldon, R. J., Kendrick, K. J., & Burgette, R. J. (2021). Latest Quaternary slip rates of the San Bernardino strand of the San Andreas fault, southern California, from Cajon Creek to Badger Canyon. *Geosphere*, 17(5), 1354-1381.
- 10002 Barnhart, W. D., Hayes, G. P., & Gold, R. D. (2019). The July 2019 Ridgecrest, California, Earthquake Sequence: Kinematics of Slip and Stressing in Cross-Fault Ruptures. *Geophysical Research Letters*, 46, 11,859-11,867.
- 10004 Fletcher, J. M., Teran, O. J., Rockwell, T. K., Oskin, M. E., Hudnut, K. W., Spelz, R. M., Lacan, P., Dorsey, M. T., Ostermeijer, G., Mitchell, T. M., Akciz, S. O., Hernandez-Flores, A., Hinojosa, A., Peña-Villa, I., & Lynch, D. K. (2020). An analysis of the factors that control fault zone architecture and the importance of fault orientation relative to regional stress. *GSA Bulletin*, 132(9-10), 2084-2104.
- 10006 Hauksson, E., Yoon, C., Yu, E., Andrews, J. R., Alvarez, M., Bhadha, R., & Thomas, V. (2020). Caltech/USGS Southern California Seismic Network (SCSN) and Southern California Earthquake Data Center (SCEDC): Data Availability for the 2019 Ridgecrest Sequence. *Seismological Research Letters*, 91(4), 1961-1970.
- 10008 Retailleau, L., & Beroza, G. C. (2021). Towards structural imaging using seismic ambient field correlation artefacts. *Geophysical Journal International*, 225(2), 1453-1465.
- 10013 Zhang, L., Goda, K., Werner, M. J., & Tesfamariam, S. (2020). Spatiotemporal seismic hazard and risk assessment of M9.0 megathrust earthquake sequences of wood-frame houses in Victoria, British Columbia, Canada. *Earthquake Engineering & Structural Dynamics*,.
- 10014 Rattetz, H., & Veveakis, M. (2020). Weak phases production and heat generation control fault friction during seismic slip. *Nature Communications*, 11(1), 350.

- 10015 Rattez, H., Disidoro, F., Sulem, J., & Veveakis, E. (2020). Influence of dissolution on frictional properties of carbonate faults. *Geomechanics for the Energy and the Environment*,
- 10017 Mancini, S., Segou, M., Werner, M. J., & Parsons, T. (2020). The Predictive Skills of Elastic Coulomb Rate-and-State Aftershock Forecasts during the 2019 Ridgecrest, California, Earthquake Sequence. *Bulletin of the Seismological Society of America*, 110(4), 1736-1751.
- 10018 Prush, V. B., & Oskin, M. E. (2020). A mechanistic erosion model for cosmogenic nuclide inheritance in single-clast exposure ages. *Earth and Planetary Science Letters*, 535.
- 10025 Hughes, A., Bell, R., Mildon, Z. K., Rood, D. H., Whittaker, A. S., Rockwell, T. K., Levy, Y., DeVecchio, D. E., Marshall, S. T., & Nicholson, C. (2020). Three-Dimensional Structure, Ground Rupture Hazards, and Static Stress Models for Complex Nonplanar Thrust Faults in the Ventura Basin, Southern California. *Journal of Geophysical Research: Solid Earth*, 125(7).
- 10026 Tanimoto, T., & Wang, J. (2020). Shallow elasticity structure from colocated pressure and seismic stations in the Piñon Flat Observatory and estimation of Vs30. *Geophysical Journal International*, 222(1), 678-696.
- 10030 Yao, D., Huang, Y., Peng, Z., & Castro, R. R. (2020). Detailed Investigation of the Foreshock Sequence of the 2010 Mw 7.2 El Mayor-Cucapah Earthquake. *Journal of Geophysical Research: Solid Earth*, 125(6).
- 10036 Donnellan, A., Lyzenga, G., Ansar, A., Goulet, C., Wang, J., & Pierce, M. (2020). Targeted High-Resolution Structure from Motion Observations over the Mw 6.4 and 7.1 Ruptures of the Ridgecrest Earthquake Sequence. *Seismological Research Letters*, 91(4), 2087-2095.
- 10037 Dorsey, M. T., Rockwell, T. K., Girty, G. G., Ostermeijer, G. A., Browning, J., Mitchell, T. M., & Fletcher, J. M. (2020). Evidence of hydrothermal brine circulation driving elemental mass redistribution in an active fault zone. *J. Structural Geology*, (accepted).
- 10043 Scott, C., Bunds, M., Shirzaei, M., & Toke, N. (2020). Creep Along the Central San Andreas Fault From Surface Fractures, Topographic Differencing, and InSAR. *Journal of Geophysical Research: Solid Earth*, 125(10).
- 10046 Martínez-Garzón, P., Ben-Zion, Y., Zaliapin, I., & Bohnhoff, M. (2019). Seismic clustering in the Sea of Marmara: Implications for monitoring earthquake processes. *Tectonophysics*, 768.
- 10047 Henricksen, K., & Zaliapin, I. (2019). Hyperbolic property of earthquake networks. In *JSM Proceedings, Statistics and the Environment Section*. Alexandria, VA: American Statistical Association, 2024 – 2047.
- 10048 Ben-Zion, Y., & Zaliapin, I. (2020). Localization and coalescence of seismicity before large earthquakes. *Geophysical Journal International*, 223(1), 561-583.
- 10049 Zaliapin, I., & Ben-Zion, Y. (2020). Earthquake Declustering Using the Nearest-Neighbor Approach in Space-Time-Magnitude Domain. *Journal of Geophysical Research: Solid Earth*, 125(4).
- 10053 Abolfathian, N., Martínez-Garzón, P., & Ben-Zion, Y. (2020). Variations of Stress Parameters in the Southern California Plate Boundary Around the South Central Transverse Ranges. *Journal of Geophysical Research: Solid Earth*, 125(8).
- 10055 Field, E. H., Milner, K. R., & Porter, K. A. (2020). Assessing the value of removing earthquake-hazard-related epistemic uncertainties, exemplified using average annual loss in California. *Earthquake Spectra*, 36(4), 1912-1929.
- 10059 Wang, Y., Allam, A. A., & Lin, F. (2019). Imaging the Fault Damage Zone of the San Jacinto Fault Near Anza With Ambient Noise Tomography Using a Dense Nodal Array. *Geophysical Research Letters*, 46(22), 12938-12948.
- 10060 Sleep, N. H., & Hough, S. E. (2020). Mild Displacements of Boulders during the 2019 Ridgecrest Earthquakes. *Bulletin of the Seismological Society of America*, 110(4), 1579-1588.

- 10063 Seylabi, E., Restrepo, D., Taborda, R., & Asimaki, D. (2020). Deterministic ground motion simulations with shallow crust nonlinearity at Garner Valley in Southern California. *Earthquake Engineering & Structural Dynamics*, 50(1), 43-59.
- 10066 Wang, X., & Zhan, Z. (2019). Moving from 1-D to 3-D velocity model: automated waveform-based earthquake moment tensor inversion in the Los Angeles region. *Geophysical Journal International*, 220(1), 218-234.
- 10067 Wang, K., & Bürgmann, R. (2020). Co- and Early Postseismic Deformation Due to the 2019 Ridgecrest Earthquake Sequence Constrained by Sentinel-1 and COSMO-SkyMed SAR Data. *Seismological Research Letters*, 91(4), 1998-2009.
- 10070 Milliner, C., & Donnellan, A. (2020). Using Daily Observations from Planet Labs Satellite Imagery to Separate the Surface Deformation between the 4 July Mw 6.4 Foreshock and 5 July Mw 7.1 Mainshock during the 2019 Ridgecrest Earthquake Sequence. *Seismological Research Letters*, 91(4), 1986-1997.
- 10073 Jiang, J., & Lohman, R. B. (2020). Coherence-guided InSAR deformation analysis in the presence of ongoing land surface changes in the Imperial Valley, California. *Remote Sensing of Environment*,.
- 10075 Hauksson, E., & Jones, L. M. (2020). Seismicity, Stress State, and Style of Faulting of the Ridgecrest-Coso Region from the 1930s to 2019: Seismotectonics of an Evolving Plate Boundary Segment. *Bulletin of the Seismological Society of America*, 1-17.
- 10077 Baker, J. W., Rezaeian, S., Goulet, C. A., Luco, N., & Teng, G. (2021). A Subset of CyberShake Ground Motion Time Series for Response History Analysis. *Earthquake Spectra*, 37(2), 1162-1176.
- 10082 Savran, W. H., Werner, M. J., Marzocchi, W., Rhoades, D. A., Jackson, D. D., Milner, K., Field, E., & Michael, A. (2020). Pseudoprospective Evaluation of UCERF3-ETAS Forecasts during the 2019 Ridgecrest Sequence. *Bulletin of the Seismological Society of America*, 110(4), 1799-1817.
- 10083 Savran, W. H., & Olsen, K. B. (2020). Kinematic Rupture Generator Based on 3-D Spontaneous Rupture Simulations Along Geometrically Rough Faults. *Journal of Geophysical Research: Solid Earth*, 125(10).
- 10084 Idini, B., & Ampuero, J. (2019). Fault-zone damage promotes pulse-like rupture and rapid-tremor-reversals. *Nature Geoscience*,.
- 10085 Lambert, V. R., Lapusta, N., & Perry, S. M. (2021). Propagation of large earthquakes as self-healing pulses or mild cracks.. *Nature*, 591, 252–258.
- 10086 Lambert, V. R., & Lapusta, N. (2020). Comparison of seismological techniques for estimating radiated energy from crack-like ruptures and self-healing pulses. *Journal of Geophysical Research: Solid Earth*, (in preparation).
- 10087 Song, Y., Lambert, V. R., & Lapusta, N. (2020). Comparison of adaptive time-stepping algorithms for simulating sequences of earthquakes and aseismic slip. *Seismological Research Letters*, (in preparation).
- 10089 Lambert, V., & Lapusta, N. (2021). Resolving simulated sequences of earthquakes and fault interactions: implications for physics-based seismic hazard assessment. *Journal of Geophysical Research: Solid Earth*,.
- 10094 Levy, Y., Rockwell, T. K., Minas, S., Hughes, A., & Rood, D. H. (2020). Geological structure of the Sylmar basin: Implications for slip distribution along the Santa Susana fault system in the San Fernando Valley, California, U.S.A.. *Frontiers in Earth Science-Structural Geology and Tectonics*, (accepted).
- 10096 Plesch, A., Shaw, J. H., Ross, Z. E., & Hauksson, E. (2020). Detailed 3D Fault Representations for the 2019 Ridgecrest, California, Earthquake Sequence. *Bulletin of the Seismological Society of America*, 110(4), 1818-1831.

- 10102 Calzolari, G., Ault, A. K., Hirth, G., & McDermott, R. (2020). Hematite (U-Th)/He thermochronometry detects asperity flash heating during laboratory earthquakes. *Geology*, 48, 514-518.
- 10105 Scharer, K. M., & Yule, D. (2020). A Maximum Rupture Model for the Southern San Andreas and San Jacinto Faults, California, Derived From Paleoseismic Earthquake Ages: Observations and Limitations. *Geophysical Research Letters*, 47(15).
- 10107 Milner, K. R., Shaw, B. E., Goulet, C. A., Richards-Dinger, K. B., Callaghan, S., Jordan, T. H., Dieterich, J. H., & Field, E. H. (2021). Toward Physics-Based Nonergodic PSHA: A Prototype Fully Deterministic Seismic Hazard Model for Southern California. *Bulletin of the Seismological Society of America*.
- 10108 Wang, Y., & Day, S. M. (2020). Effects of Off-Fault Inelasticity on Near-Fault Directivity Pulses. *Journal of Geophysical Research: Solid Earth*, 125(7).
- 10109 Ross, Z. E., Cochran, E. S., Trugman, D. T., & Smith, J. D. (2020). 3D fault architecture controls the dynamism of earthquake swarms. *Science*, 368(6497), 1357-1361.
- 10110 DuRoss, C. B., Gold, R. D., Dawson, T., Scharer, K. M., Kendrick, K. J., Akciz, S. O., Angster, S. J., Bachhuber, J. L., Bacon, S., Bennett, S. E., Blair, L., Brooks, B. A., Bullard, T., Burgess, W. P., Chupik, C., DeFrisco, M. J., Delano, J., Dolan, J. F., Frost, E., Graehl, N. A., Haddon, E. K., Hatem, A., Hernandez, J. L., Hitchcock, C., Hudnut, K. W., Thompson Jobe, J., Koehler, R. D., Kozaci, O., Ladinsky, T., Madugo, C. M., McPhillips, D., Milliner, C., Morelan, A. E., Olson, B., Patton, J. R., Philiposian, B., Pickering, A., Pierce, I., Ponti, D. J., Seitz, G. G., Spangler, E., Swanson, B. J., Thomas, K., Treiman, J. A., Valencia, F. N., Williams, A. M., & Zinke, R. (2020). Surface Displacement Distributions for the July 2019 Ridgecrest, California, Earthquake Ruptures. *Bulletin of the Seismological Society of America*, 110(4), 1400-1418.
- 10111 Hudnut, K. W., Brooks, B. A., Scharer, K., Hernandez, J. L., Dawson, T. E., Oskin, M. E., Ramon Arrowsmith, J., Goulet, C. A., Blake, K., Boggs, M. L., Bork, S., Glennie, C. L., Fernandez-Diaz, J., Singhania, A., Hauser, D., & Sorhus, S. (2020). Airborne Lidar and Electro-Optical Imagery along Surface Ruptures of the 2019 Ridgecrest Earthquake Sequence, Southern California. *Seismological Research Letters*, 91(4), 2096-2107.
- 10113 Brandenburg, S. J., Wang, J., Buckreis, T., Issa, O., Yeung, J., Lyda, A., Gallien, T. W., Kim, Y., Lucey, J., Delisle, M., Winters, M. A., Pierce, M., Stewart, J. P., Lyzenga, G., Donnellan, A., Hudson, M. B., Ahdi, S. K., Davis, C. A., Meng, X., Goulet, C. A., Hudson, K., Nweke, C. C., Wang, P., & Yi, Z. (2020). Ground Deformation Data from GEER Investigations of Ridgecrest Earthquake Sequence. *Seismological Research Letters*, 91(4), 2024-2034.
- 10114 Pierce, I., Williams, A., Koehler, R. D., & Chupik, C. (2020). High-Resolution Structure-From-Motion Models and Orthophotos of the Southern Sections of the 2019 Mw 7.1 and 6.4 Ridgecrest Earthquakes Surface Ruptures. *Seismological Research Letters*, 91(4), 2124-2126.
- 10117 Cochran, E. S., Wolin, E., McNamara, D., Yong, A., Wilson, D., Alvarez, M., van der Elst, N., McClain, A., & Steidl, J. (2020). The U.S. Geological Survey's Rapid Seismic Array Deployment for the 2019 Ridgecrest Earthquake Sequence. *Seismological Research Letters*, 91(4), 1952-1960.
- 10118 Hardebeck, J. L. (2020). A Stress-Similarity Triggering Model for Aftershocks of the Mw 6.4 and 7.1 Ridgecrest Earthquakes. *Bulletin of the Seismological Society of America*, 110(4), 1716-1727.
- 10121 Hauksson, E., Yoon, C., Yu, E., Andrews, J. R., Alvarez, M., Bhadha, R., & Thomas, V. (2020). Caltech/USGS Southern California Seismic Network (SCSN) and Southern California Earthquake Data Center (SCEDC): Data Availability for the 2019 Ridgecrest Sequence. *Seismological Research Letters*, 91(4), 1961-1970.
- 10122 Liu, M., Zhang, M., Zhu, W., Ellsworth, W. L., & Li, H. (2020). Rapid Characterization of the July 2019 Ridgecrest, California, Earthquake Sequence From Raw Seismic Data Using Machine-Learning Phase Picker. *Geophysical Research Letters*, 47(4).

- 10123 Lomax, A. (2020). Absolute Location of 2019 Ridgecrest Seismicity Reveals a Shallow Mw 7.1 Hypocenter, Migrating and Pulsing Mw 7.1 Foreshocks, and Duplex Mw 6.4 Ruptures. *Bulletin of the Seismological Society of America*, 110(4), 1845-1858.
- 10124 Ross, Z. E., Idini, B., Jia, Z., Stephenson, O. L., Zhong, M., Wang, X., Zhan, Z., Simons, M., Fielding, E. J., Yun, S., Hauksson, E., Moore, A. W., Liu, Z., & Jung, J. (2019). Hierarchical interlocked orthogonal faulting in the 2019 Ridgecrest earthquake sequence. *Science*, 366(6463), 346-351.
- 10125 Shelly, D. R. (2020). A High-Resolution Seismic Catalog for the Initial 2019 Ridgecrest Earthquake Sequence: Foreshocks, Aftershocks, and Faulting Complexity. *Seismological Research Letters*, 91(4), 1971-1978.
- 10126 Trugman, D. T., Ross, Z. E., & Johnson, P. A. (2020). Imaging Stress and Faulting Complexity Through Earthquake Waveform Similarity. *Geophysical Research Letters*, 47(1).
- 10127 Wesnousky, S. G. (2005). Active faulting in the Walker Lane. *Tectonics*, 24(3), n/a-n/a.
- 10129 Milner, K. R., Field, E. H., Savran, W. H., Page, M. T., & Jordan, T. H. (2020). Operational Earthquake Forecasting during the 2019 Ridgecrest, California, Earthquake Sequence with the UCERF3-ETAS Model. *Seismological Research Letters*, 91(3), 1567-1578.
- 10133 Jin, Z., & Fialko, Y. (2020). Finite Slip Models of the 2019 Ridgecrest Earthquake Sequence Constrained by Space Geodetic Data and Aftershock Locations. *Bulletin of the Seismological Society of America*, 110(4), 1660-1679.
- 10135 Massonnet, D., Rossi, M., Carmona, C., Adragna, F., Peltzer, G., Feigl, K., & Rabaute, T. (1993). The displacement field of the Landers earthquake mapped by radar interferometry. *Nature*, 364(6433), 138-142.
- 10136 Pollitz, F. F. (2003). Transient rheology of the uppermost mantle beneath the Mojave Desert, California. *Earth and Planetary Science Letters*, 215(1-2), 89-104.
- 10137 Donnellan, A., Lyzenga, G., Ansar, A., Goulet, C., Wang, J., & Pierce, M. (2020). Targeted High-Resolution Structure from Motion Observations over the Mw 6.4 and 7.1 Ruptures of the Ridgecrest Earthquake Sequence. *Seismological Research Letters*, 91(4), 2087-2095.
- 10138 Anderson, J. G., Brune, J. N., Biasi, G. P., Anooshehpour, R., & Purvance, M. D. (2011). Workshop Report: Applications of Precariously Rocks and Related Fragile Geological Features to U.S. National Hazard Maps. *Seismological Research Letters*, 82(3), 431-441.
- 10139 Brune, J. N. (1996). Precariously balanced rocks and ground-motion maps for Southern California. *Bulletin of the Seismological Society of America*, 86(1A), 43-54.
- 10140 Grant Ludwig, L., Brune, J. N., Anooshehpour, R., Purvance, M. D., Brune, R. J., & Lozos, J. C. (2015). Reconciling Precariously Balanced Rocks (PBRs) with Large Earthquakes on the San Andreas Fault System. *Seismological Research Letters*, 86(5), 1345-1353.
- 10141 Stewart, J. P., Brandenburg, S. J., Wang, P., Nweke, C., Hudson, K. S., Mazzoni, S., Bozorgnia, Y., Goulet, C. A., Hudnut, K. W., Davis, C. A., Ahdi, S. K., Zareian, F., Fayaz, J., Koehler, R. D., Chupik, C., Pierce, I., Williams, A. M., Akciz, S. O., Hudson, M. B., & Kishida, T. (2019). Preliminary report on engineering and geological effects of the July 2019 Ridgecrest earthquake sequence. *Geotechnical Extreme Event Reconnaissance Association*, 1-69.
- 10144 Yuan, C., Bryan, J., & Denolle, M. (2021). Numerical comparison of time-, frequency- and wavelet-domain methods for coda wave interferometry. *Geophysical Journal International*, 226(2), 828-846.
- 10148 O'Reilly, O., & Nordström, J. (2020). Provably non-stiff implementation of weak coupling conditions for hyperbolic problems. *Computer Methods in Applied Mechanics and Engineering*, (in preparation).
- 10149 Mancini, S., Werner, M. J., Segou, M., & Baptie, B. (2021). Probabilistic Forecasting of Hydraulic Fracturing-Induced Seismicity Using an Injection-Rate Driven ETAS Model. *Seismological Research Letters*,.

- 10150 Shaddox, H. R., Schwartz, S. Y., & Bartlow, N. M. (2020). Triggered and Spontaneous Slow Slip Transients on the Anza Segment of the San Jacinto Fault Zone, Southern California. *Journal of Geophysical Research*, (submitted).
- 10153 Qiu, H., Allam, A. A., Lin, F., & Ben-Zion, Y. (2020). Analysis of Fault Zone Resonance Modes Recorded by a Dense Seismic Array Across the San Jacinto Fault Zone at Blackburn Saddle. *Journal of Geophysical Research: Solid Earth*, 125(10).
- 10172 Ghofrani, H., & Atkinson, G. M. (2020). Activation Rate of Seismicity for Hydraulic Fracture Wells in the Western Canada Sedimentary Basin. *Bulletin of the Seismological Society of America*, 110(5), 2252-2271.
- 10173 Holmgren, J. M., Atkinson, G. M., & Ghofrani, H. (2020). Reconciling Ground Motions and Stress Drops for Induced Earthquakes in the Western Canada Sedimentary Basin. *Bulletin of the Seismological Society of America*, 110(5), 2398-2410.
- 10174 Holmgren, J., Atkinson, G. M., & Ghofrani, H. (2019). Stress Drops and Directivity of Induced Earthquakes in the Western Canada Sedimentary Basin. *Bulletin of the Seismological Society of America*, 109(5), 1635-1652.
- 10175 Kukovica, J., Ghofrani, H., & Molnar, S. (2019). Probabilistic Seismic Hazard Analysis of Victoria, British Columbia: Considering an Active Fault Zone in the Nearby Leech River Valley. *Bulletin of the Seismological Society of America*, 109(5), 2050-2062.
- 10179 Zimmaro, P., Nweke, C. C., Hernandez, J. L., Hudson, K. S., Hudson, M. B., Ahdi, S. K., Boggs, M. L., Davis, C. A., Goulet, C. A., Brandenburg, S. J., Hudnut, K. W., & Stewart, J. P. (2020). Liquefaction and Related Ground Failure from July 2019 Ridgecrest Earthquake Sequence. *Bulletin of the Seismological Society of America*, 110(4), 1549-1566.
- 10180 Goulet, C. A., Wang, Y., Nweke, C. C., Tang, B., Wang, P., Hudson, K. S., Ahdi, S. K., Meng, X., Hudson, M. B., Donnellan, A., Lyzenga, G. A., Brandenburg, S. J., Stewart, J. P., Gallien, T., & Winters, M. A. (2021). Comparison of Near-Fault Displacement Interpretations from Field and Aerial Data for the M 6.5 and 7.1 Ridgecrest Earthquake Sequence Ruptures. *Bulletin of the Seismological Society of America*, 111(5), 2317-2333.
- 10214 Shaw, B. E. (2019). Beyond Backslip: Improvement of Earthquake Simulators from New Hybrid Loading Conditions. *Bulletin of the Seismological Society of America*, 109(6), 2159-2167.
- 10217 Karlsson, K. W., Rockwell, T. K., Fletcher, J. M., Figueiredo, P. M., Cambron Rosas, J., Gontz, A. M., Prasanajit Naik, S., Lacan, P., Spelz, R. M., Owen, L. A., Peña Villa, I. A., & Loya, R. (2021). Large Holocene ruptures on the Cañada David detachment, Baja California, Mexico; implications for the seismogenesis of low-angle normal faults. *Earth and Planetary Science Letters*, 570.
- 10218 Rockwell, T. K., Meltzner, A. J., Haaker, E. C., & Madugo, D. V. (2022). The late Holocene history of Lake Cahuilla: Two thousand years of repeated fillings within the Salton Trough, Imperial Valley, California. *Quaternary Science Reviews*, (accepted).
- 10303 Luttrell, K., & Hardebeck, J. (2021). A Unified Model of Crustal Stress Heterogeneity From Borehole Breakouts and Earthquake Focal Mechanisms. *Journal of Geophysical Research: Solid Earth*, 126(2).
- 10367 Lozos, J. C., & Harris, R. A. (2020). Dynamic rupture simulations of the M6.4 and M7.1 July 2019 Ridgecrest, California, earthquakes. *Geophysical Research Letters*, 47(7).
- 10777 Stirling, M., Oskin, M. E., Arrowsmith, R., Rood, A. H., Goulet, C. A., Grant Ludwig, L., King, T., Kottke, A. R., Lozos, J. C., Madugo, C. M., McPhillips, D., Rood, D. H., Sleep, N. H., & Wittich, C. (2020). Evaluation of seismic hazard models with fragile geologic features. *Seismological Research Letters*, 92(1), 314-324.
- 10780 Dorsett, J. H., Johnson, K. M., Puel, S., & Becker, T. W. (2020). Inferring mantle viscosity in Southern California from early Ridgecrest earthquake postseismic deformation. *Journal of Geophysical Research--Solid Earth*, (submitted).

- 10782 Lambert, V., Lapusta, N., & Faulkner, D. (2021). Scale dependence of earthquake rupture prestress in models with enhanced weakening: Implications for event statistics and inferences of fault stress. *Journal of Geophysical Research: Solid Earth*,.
- 10787 Almquist, M., & Dunham, E. M. (2020). Elastic wave propagation in anisotropic solids using energy-stable finite differences with weakly enforced boundary and interface conditions. *Journal of Computational Physics*, 424.
- 10791 Lin, T., Rezaeian, S., Luco, N., Deierlein, G., Baker, J. W., & Zareian, F. (2020). Guidelines on Utilization of Simulated Ground Motions for Engineering Building Response Applications. *Earthquake Spectra*, (in preparation).
- 10793 Zhong, K., Lin, T., Deierlein, G. G., Graves, R. W., Silva, F., & Luco, N. (2020). Tall building performance-based seismic design using SCEC broadband platform site-specific ground motion simulations. *Earthquake Engineering & Structural Dynamics*, 1-18.
- 10797 Barnhart, W. D., Gold, R. D., & Hollingsworth, J. (2020). Localized fault-zone dilatancy and surface inelasticity of the 2019 Ridgecrest earthquakes. *Nature Geoscience*, 13(10), 699-704.
- 10799 Lambert, V. R., & Lapusta, N. (2022). Absolute stress levels on fault models: Links to seismological observables and differences for crack-like ruptures and self-healing pulses. *Earth and Planetary Science Letters*, (in preparation).
- 10803 Cheng, Y., Ben-Zion, Y., Brenguier, F., Johnson, C. W., Li, Z., Share, P., Mordret, A., Boué, P., & Vernon, F. L. (2020). An Automated Method for Developing a Catalog of Small Earthquakes Using Data of a Dense Seismic Array and Nearby Stations. *Seismological Research Letters*, 91(5), 2862-2871.
- 10804 Cheng, Y., & Ben-Zion, Y. (2019). Transient Brittle-Ductile Transition Depth Induced by Moderate-Large Earthquakes in Southern and Baja California. *Geophysical Research Letters*, 46(20), 11109-11117.
- 10811 Qiu, H., Lin, F., & Ben-Zion, Y. (2019). Eikonal Tomography of the Southern California Plate Boundary Region. *Journal of Geophysical Research: Solid Earth*, 124(9), 9755-9779.
- 10813 Herrmann, M., Kraft, T., Tormann, T., Scarabello, L., & Wiemer, S. (2019). A Consistent High-Resolution Catalog of Induced Seismicity in Basel Based on Matched Filter Detection and Tailored Post-Processing. *Journal of Geophysical Research: Solid Earth*, 124(8), 8449-8477.
- 10816 Segou, M., & Parsons, T. (2020). A New Technique to Calculate Earthquake Stress Transfer and to Probe the Physics of Aftershocks. *Bulletin of the Seismological Society of America*, 110(2), 863-873.
- 10819 Barbery, M. R., Chester, F. M., & Chester, J. S. (2021). Characterizing the distribution of temperature and normal stress on flash-heated granite surfaces at seismic slip rates. *Journal of Geophysical Research: Solid Earth*, 126.
- 10820 Ahdi, S. K., Mazzoni, S., Kishida, T., Wang, P., Nweke, C., Kuehn, N. M., Contreras, V., Rowshandel, B., Stewart, J. P., & Bozorgnia, Y. (2020). Engineering Characteristics of Ground Motions Recorded in the 2019 Ridgecrest Earthquake Sequence. *Bulletin of the Seismological Society of America*, 110(4), 1474-1494.
- 10821 Yang, Y., Dunham, E. M., Barnier, G., & Almquist, M. (2019). Tsunami Wavefield Reconstruction and Forecasting Using the Ensemble Kalman Filter. *Geophysical Research Letters*, 46(2), 853-860.
- 10822 Schulte-Pelkum, V., Ross, Z. E., Mueller, K. J., & Ben-Zion, Y. (2020). Tectonic Inheritance With Dipping Faults and Deformation Fabric in the Brittle and Ductile Southern California Crust. *Journal of Geophysical Research: Solid Earth*, 125(8).
- 10823 Shaddock, H. R., & Schwartz, S. Y. (2019). Subducted seamount diverts shallow slow slip to the forearc of the northern Hikurangi subduction zone, New Zealand. *Geology*, 47(5), 415-418.

- 10826 Luo, B., Duan, B., & Liu, D. (2020). 3D Finite-Element Modeling of Dynamic Rupture and Aseismic Slip over Earthquake Cycles on Geometrically Complex Faults. *Bulletin of the Seismological Society of America*, 110(6), 2619-2637.
- 10833 Rodgers, A. J., Pitarka, A., & McCallen, D. B. (2019). The Effect of Fault Geometry and Minimum Shear Wavespeed on 3D Ground-Motion Simulations for an Mw 6.5 Hayward Fault Scenario Earthquake, San Francisco Bay Area, Northern California. *Bulletin of the Seismological Society of America*, 109(4), 1265-1281.
- 10844 Zurbuchen, J. M., Simms, A. R., & Huot, S. (2020). Episodic coastal progradation of the coastal Oxnard Plain, southern California. *Journal of Coastal Research*, 36, 1130-1144.
- 10845 Shearer, P. M., & Abercrombie, R. E. (2020). Calibrating Spectral Decomposition of Local Earthquakes using Borehole Seismic Records---Results for the 1992 Big Bear Aftershocks in Southern California. *Journal of Geophysical Research*,.
- 10846 Yang, Y., & Dunham, E. (2020). Effect of Porosity and Permeability Evolution in Injection-Induced Aseismic Slip. *Journal of Geophysical Research, Solid Earth*,.
- 10847 Xia, H., & Platt, J. P. (2018). Is the Vincent fault in southern California the Laramide subduction zone megathrust?. *GSA Bulletin*, 131(1-2), 120-136.
- 10849 Kozaci, O. (2012). Dendroseismology on the central North Anatolian fault, Turkey: Documenting three centuries of surface rupture history using tree rings. *Journal of Geophysical Research: Solid Earth*, 117(B1), n/a-n/a.
- 10850 Kozaci, O., Dolan, J. F., Yönlü, Ö., & Hartleb, R. D. (2011). Paleoseismologic evidence for the relatively regular recurrence of infrequent, large-magnitude earthquakes on the eastern North Anatolian fault at Yaylabeli, Turkey. *Lithosphere*, 3(1), 37-54.
- 10852 Ponti, D. J., Morelan, A. E., Padilla, S. E., Oskin, M. E., Olson, B., O'Neal, M., Nevitt, J. M., Nale, S., Mongovin, D. D., Philibosian, B., Milliner, C., McPhillips, D., McDonald, J., Mareschal, M., Madugo, C. M., Leeper, R. J., Ladinsky, T., patton, j. R., Pierce, I., Koehler, R. D., Jobe, J., Zimmerman, J., Zachariasen, J., Xu, X., Williams, A. M., Vanderwal, J., Valencia, F. N., Treiman, J. A., Swanson, B. J., Pridmore, C., Spangler, E., Smith-Konter, B. R., Singleton, D. M., Seitz, G. G., Scharer, K. M., Sandwell, D. T., Roth, N., Kozaci, O., Kendrick, K. J., Blair, J., Barth, N. C., Burgess, P., Bullard, T., Brooks, B. A., Bork, S., Blake, K., Bennett, S. E., Bacon, S., Dawson, T., Bachhuber, J. L., Avouac, J., Angster, S. J., Akciz, S. O., Pickering, A., Thomas, K., Rosa, C., Chupik, C., DeFrisco, M. J., Hudnut, K. W., Graehl, N. A., Holland, P., Hitchcock, C., Hernandez, J. L., Helms, J., Hatem, A., Haddon, E. K., Gutierrez, C., Gold, R. D., Delano, J., Funning, G. J., Frost, E., Ericksen, T., DuRoss, C. B., Donnellan, A., Dolan, J. F., DeLong, S., & Zinke, R. (2020). Documentation of Surface Fault Rupture and Ground-Deformation Features Produced by the 4 and 5 July 2019 Mw 6.4 and Mw 7.1 Ridgecrest Earthquake Sequence. *Seismological Research Letters*, 91(5), 2942-2959.
- 10854 Xu, X., & Sandwell, D. T. (2020). Toward Absolute Phase Change Recovery With InSAR: Correcting for Earth Tides and Phase Unwrapping Ambiguities. *IEEE Transactions on Geoscience and Remote Sensing*, 58(1), 726-733.
- 10855 Xu, X., Sandwell, D. T., & Smith-Konter, B. R. (2020). Coseismic Displacements and Surface Fractures from Sentinel-1 InSAR: 2019 Ridgecrest Earthquakes. *Seismological Research Letters*, 91(4), 1979-1985.
- 10856 Klein, E., Bock, Y., Xu, X., Sandwell, D. T., Golriz, D., Fang, P., & Su, L. (2019). Transient Deformation in California From Two Decades of GPS Displacements: Implications for a Three-Dimensional Kinematic Reference Frame. *Journal of Geophysical Research: Solid Earth*, 124(11), 12189-12223.
- 10861 Peshette, P. L., Lozos, J. C., Yule, D., & Evans, E. L. (2019). Dynamic Rupture Modeling to Investigate the Role of Fault Geometry in Jumping Rupture Between Parallel-Trace Thrust Faults. *Bulletin of the Seismological Society of America*, 109(6), 2168-2186.

- 10864 Xu, X., Sandwell, D. T., Ward, L. A., Milliner, C., Smith-Konter, B. R., Fang, P., & Bock, Y. (2020). Surface deformation associated with fractures near the 2019 Ridgecrest earthquake sequence. *Science*, 370(6516), 605-608.
- 10868 Ulloa, S., & Lozos, J. C. (2020). Surface Displacement and Ground Motion from Dynamic Rupture Models of Thrust Faults with Variable Dip Angles and Burial Depths. *Bulletin of the Seismological Society of America*, 110(6), 2599-2618.
- 10869 Wang, L., & Barbot, S. (2020). Excitation of San Andreas tremors by thermal instabilities below the seismogenic zone. *Science Advances*, 6(36).
- 10870 Barbot, S. (2020). Mantle flow distribution beneath the California margin. *Nature Communications*, 11(1).
- 10871 Yang, L., Liu, X., & Beroza, G. C. (2020). Revisiting Evidence for Widespread Seismicity in the Upper Mantle under Los Angeles. *Science Advances*, (accepted).
- 10872 Kato, A., & Ben-Zion, Y. (2020). The generation of large earthquakes. *Nature Reviews Earth & Environment*,.
- 10875 Wang, J., & Tanimoto, T. (2020). Estimating Near-Surface Rigidity from Low-Frequency Noise Using Collocated Pressure and Horizontal Seismic Data. *Bulletin of the Seismological Society of America*, 110(4), 1960-1970.
- 10876 Xiao, H., Eilon, Z., Ji, C., & Tanimoto, T. (2020). COVID-19 Societal Response Captured by Seismic Noise in China and Italy. *Seismological Research Letters*, 91(5), 2757-2768.
- 10877 Tanimoto, T., & Li, Y. (2020). Nature of Low-Frequency, Atmosphere-Generated Seismic Noise. *Journal of Geophysical Research: Solid Earth*, 125(7).
- 10884 Cortez, J. T., Oglesby, D. D., Kyriakopoulos, C., Wu, B., Chaudhuri, K., Ghosh, A., & Douilly, R. (2021). On the Rupture Propagation of the 2019 M6.4 Searles Valley, California, Earthquake, and the Lack of Immediate Triggering of the M7.1 Ridgecrest Earthquake. *Geophysical Research Letters*, 48(4).
- 10885 Hu, Z., Roten, D., Olsen, K. B., & Day, S. M. (2021). Modeling of Empirical Transfer Functions with 3D Velocity Structure. *Bulletin of the Seismological Society of America*, 111(4), 2042-2056.
- 10887 Bemis, S. P., Scharer, K., & Dolan, J. F. (2021). The San Andreas Fault Paleoseismic Record at Elizabeth Lake: Why are There Fewer Surface-Rupturing Earthquakes on the Mojave Section?. *Bulletin of the Seismological Society of America*, 111(3), 1590-1613.
- 10893 Ji, C., & Archuleta, R. J. (2020). Two empirical double-corner frequency source spectra and their physical implications. *Bulletin of the Seismological Society of America*, 111(2), 737-761.
- 10898 Cheng, Y., & Ben-Zion, Y. (2020). Variations of Earthquake Properties Before, During, and After the 2019 M7.1 Ridgecrest, CA, Earthquake. *Geophysical Research Letters*, 47(18).
- 10899 Catchings, R. D., Goldman, M. R., Steidl, J. H., Chan, J. H., Allam, A. A., Criley, C. J., Ma, Z., Langermann, D. S., Huddleston, G. J., McEvilly, A. T., Mongovin, D. D., Berg, E. M., & Ben-Zion, Y. (2020). Nodal Seismograph Recordings of the 2019 Ridgecrest Earthquake Sequence. *Seismological Research Letters*, 91(6), 3622-3633.
- 10900 Juarez, A., & Ben-Zion, Y. (2020). Effects of Shallow-Velocity Reductions on 3D Propagation of Seismic Waves. *Seismological Research Letters*, 91(6), 3313-3322.
- 10901 Meng, H., McGuire, J. J., & Ben-Zion, Y. (2020). Semiautomated Estimates of Directivity and Related Source Properties of Small to Moderate Southern California Earthquakes Using Second Seismic Moments. *Journal of Geophysical Research: Solid Earth*, 125(4).
- 10903 Share, P., Tábořík, P., Stepáncikova, P., Stemberk, J., Rockwell, T. K., Wade, A., Arrowsmith, R., Donnellan, A., Vernon, F. L., & Ben-Zion, Y. (2020). Characterizing the uppermost 100 m structure of the San Jacinto fault zone southeast of Anza, California, through joint analysis of geological, topographic, seismic and resistivity data. *Geophysical Journal International*, 222(2), 781-794.

- 10904 White, M. C., Fang, H., Catchings, R. D., Goldman, M. R., Steidl, J. H., & Ben-Zion, Y. (2021). Detailed traveltimes tomography and seismic catalogue around the 2019 Mw7.1 Ridgecrest, California, earthquake using dense rapid-response seismic data. *Geophysical Journal International*, 227(1), 204-227.
- 10905 Qiu, H., Ben-Zion, Y., Catchings, R., Goldman, M. R., Allam, A. A., & Steidl, J. (2021). Seismic Imaging of the Mw 7.1 Ridgecrest Earthquake Rupture Zone From Data Recorded by Dense Linear Arrays. *Journal of Geophysical Research: Solid Earth*, 126(7).
- 10907 Field, E. H. (2007). Overview of the Working Group for the Development of Regional Earthquake Likelihood Models (RELM). *Seismological Research Letters*, 78(1), 7-16.
- 10906 Jordan, T. H. (2006). Earthquake Predictability, Brick by Brick. *Seismological Research Letters*, 77(1), 3-6.
- 10908 Jordan, T. H., Chen, Y., Gasparini, P., Madariaga, R., Main, I., Marzocchi, W., Papadopoulos, G., Sobolev, G., Yamaoka, K., & Zschau, J. (2011). OPERATIONAL EARTHQUAKE FORECASTING. State of Knowledge and Guidelines for Utilization. *Annals of Geophysics*, 54(4).
- 10911 Wang, N., Olsen, K. B., & Day, S. M. (2021). A frequency-dependent ground-motion spatial correlation model of within-event residuals for Fourier amplitude spectra. *Earthquake Spectra*, 37(3), 2041-2065.
- 10916 Harris, R. A., Barall, M., Lockner, D. A., Moore, D. E., Ponce, D. A., Graymer, R. W., Funning, G., Morrow, C. A., Kyriakopoulos, C., & Eberhart-Phillips, D. (2021). A geology and geodesy based model of dynamic earthquake rupture on the Rodgers Creek-Hayward-Calaveras fault system, California. *Journal of Geophysical Research: Solid Earth*, 126.
- 10921 Lund Snee, J., & Zoback, M. D. (2020). Multiscale variations of the crustal stress field throughout North America. *Nature Communications*, 11(1).
- 10924 Rodriguez Padilla, A. M., Oskin, M. E., Rockwell, T. K., Delusina, I., & Singleton, D. M. (2021). Joint earthquake ruptures of the San Andreas and San Jacinto faults, California, USA. *Geology*,.
- 10926 Bonilla, L. F., & Ben-Zion, Y. (2020). Detailed space–time variations of the seismic response of the shallow crust to small earthquakes from analysis of dense array data. *Geophysical Journal International*, 225(1), 298-310.
- 10927 Ben-Zion, Y., & Zaliapin, I. (2019). Spatial variations of rock damage production by earthquakes in southern California. *Earth and Planetary Science Letters*, 512, 184-193.
- 10928 Lu, Y., & Ben-Zion, Y. (2021). Regional seismic velocity changes following the 2019 Mw 7.1 Ridgecrest, California earthquake from autocorrelations and P/S converted waves. *Geophysical Journal International*, 228(1), 620-630.
- 10929 Rundle, J. B., Granat, R., Donnellan, A., Fox, G., & Crutchfield, J. P. (2021). Nowcasting Earthquakes: Imaging the Earthquake Cycle in California With Machine Learning. *Earth and Space Science*, 8(12).
- 10931 Filippitzis, F., Kohler, M., Heaton, T., Graves, R., Clayton, R., Guy, R., Bunn, J., & Chandy, K. (2021). Ground motions in urban Los Angeles from the 2019 Ridgecrest earthquake sequence. *Earthquake Spectra*, 37(4), 2493-2522.
- 10932 Gordon, J., Schoenberg, F., & Fox, E. (2021). A Nonparametric Hawkes Model for Forecasting California Seismicity. *Bulletin of the Seismological Society of America*, 111(4), 2216-2234.
- 10935 Schoenberg, F. P. (2021). Nonparametric estimation of variable productivity Hawkes processes. *Journal of Time Series Analysis*, (under review).
- 10936 Jia, R., Tamadon, C., & Schoenberg, F. P. (2021). Goodness-of-fit assessment of earthquake forecasts using Voronoi and superthinned residuals. *Seismological Research Letters*, (under review).

- 10938 Tal, Y., Rubino, V., Rosakis, A. J., & Lapusta, N. (2020). Illuminating the physics of dynamic friction through laboratory earthquakes on thrust faults. *Proceedings of the National Academy of Sciences*, 117(35), 21095-21100.
- 10941 Biasi, G. P., & Wesnousky, S. G. (2021). Rupture Passing Probabilities at Fault Bends and Steps, with Application to Rupture Length Probabilities for Earthquake Early Warning. *Bulletin of the Seismological Society of America*, 111(4), 2235-2247.
- 10942 Liu, D., Duan, B., Scharer, K. M., & Yule, D. (2021). Observation-constrained multicycle dynamic models of the southern San Andreas and San Jacinto faults: addressing complexity in paleoseismicity with realistic fault geometry. *Journal of Geophysical Research*, (in preparation).
- 10943 Abercrombie, R. E. (2021). Resolution and uncertainties in estimates of earthquake stress drop and energy release. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 379(2196).
- 10948 Ajala, R., & Persaud, P. (2021). Effect of Merging Multiscale Models on Seismic Wavefield Predictions Near the Southern San Andreas Fault. *Journal of Geophysical Research: Solid Earth*, 126(10).
- 10950 Ajala, R., Persaud, P., & Juarez, A. (2021). Earthquake Ground Motions in Community and Hybrid Earth Models in Salton Trough: Coupling Influence of Topography, Geotechnical Layering, and Anelasticity. *Geophysical Research Letters*, (in preparation).
- 10955 Kain, J. O., & Persaud, P. (2021). Insight into the Stress Field of the Southern Los Angeles Basin, California Determined from Borehole Breakout and Drilling Induced Fracture Analysis . Insight into the Stress Field of the Southern Los Angeles Basin, California Determined from Borehole Breakout and Drilling Induced Fracture Analysis (in preparation).
- 10957 Meng, H., & Fan, W. (2021). Prevalent seismic nucleation phases indicating a common cascading earthquake rupture growth trajectory. *Geophysical Research Letters*, (submitted).
- 10958 Meng, H., Fan, W., McGuire, J. J., & Cochran, E. S. (2021). Finite-source attributes of 39 M3.8 to M5.5 Ridgecrest earthquakes. *Journal of Geophysical Research: Solid Earth*, (in preparation).
- 10961 Wang, Y., & Goulet, C. A. (2021). Validation of fault displacements from dynamic rupture simulations against the observations from the 1992 Landers earthquake. *Bulletin of the Seismological Society of America*,.
- 10963 Ward, L. A., Smith-Konter, B. R., Xu, X., & Sandwell, D. T. (2021). Seismic Moment Accumulation Response to Lateral Crustal Variations of the San Andreas Fault System. *Journal of Geophysical Research: Solid Earth*,.
- 10964 Gualandi, A., & Liu, Z. (2021). Variational Bayesian Independent Component Analysis for InSAR Displacement Time-Series With Application to Central California, USA. *Journal of Geophysical Research: Solid Earth*, 126(4).
- 10968 Berg, E. M., Lin, F., Schulte-Pelkum, V., Allam, A., Qiu, H., & Gkogkas, K. (2021). Shallow Crustal Shear Velocity and Vp/Vs Across Southern California: Joint Inversion of Short-Period Rayleigh Wave Ellipticity, Phase Velocity, and Teleseismic Receiver Functions. *Geophysical Research Letters*, 48(15).
- 10973 Tung, S., Shirzaei, M., Ojha, C., Pepe, A., & Liu, Z. (2021). Structural Controls Over the 2019 Ridgecrest Earthquake Sequence Investigated by High-Fidelity Elastic Models of 3D Velocity Structures. *Journal of Geophysical Research: Solid Earth*, 126(7).
- 10983 Liu, X., Beroza, G. C., Yang, L., & Ellsworth, W. L. (2021). Ambient noise Love wave attenuation tomography for the LASSIE array across the Los Angeles basin. *Science Advances*, 7(22).
- 10985 Busby, R. W., & Aderhold, K. (2020). The Alaska Transportable Array: As Built. *Seismological Research Letters*, 91(6), 3017-3027.
- 10986 Gibbons, S. J., Ruppert, N., Karasözen, E., Aderhold, K., & Dickson, I. (2020). Resolving Northern Alaska Earthquake Sequences Using the Transportable Array and Probabilistic Location Methods. *Seismological Research Letters*, 91(6), 3028-3038.

- 10987 Young, E. K., Cowgill, E., Scharer, K. M., Anderson-Merritt, E. O., Keen-Zebert, A., & Weldon, R. J. (2021). Late Holocene Slip Rate of the Mojave Section of the San Andreas Fault near Palmdale, California. *Bulletin of the Seismological Society of America*, 111(6), 3204-3225.
- 10988 Hofmann, F., Cooperdock, E., West, J., Hildebrandt, D., Strößner, K., & Farley, K. (2021). Exposure dating of detrital magnetite using ^3He enabled by microCT and calibration of the cosmogenic ^3He production rate in magnetite. *Geochronology*, 3(2), 395-414.
- 10991 Lambert, V. R., & Lapusta, N. (2020). Rupture-dependent breakdown energy in fault models with thermo-hydro-mechanical processes. *Solid Earth*, 11(6), 2283-2302.
- 10992 Kozdon, J. E., Erickson, B. A., & Wilcox, L. C. (2021). Hybridized Summation-by-Parts Finite Difference Methods. *Journal of Scientific Computing*, 87(3), 1-28.
- 10993 Pulinets, S. A., Tsidilina, M., Ouzounov, D., & Davidenko, D. (2021). From Hector Mine M7.1 to Ridgecrest M7.1 Earthquake. A Look from a 20-Year Perspective. *Atmosphere*, 12(2).
- 10995 Rodriguez Padilla, A. M., Oskin, M. E., Milliner, C., & Plesch, A. (2021). Widespread rock damage from the 2019 Ridgecrest earthquakes. *Nature Geoscience*, (accepted).
- 11001 Dascher-Cousineau, K., Finnegan, N. J., & Brodsky, E. E. (2021). The life span of fault-crossing channels. *Science*, 373(6551), 204-207.
- 11006 Donnellan, A., Suarez, J., Asimaki, D., Goulet, C. A., McPhillips, D., Meng, X., Devine, S. C., & Lyzenga, G. A. (2021). Toppling of Trona Pinnacles in the 2019 Ridgecrest Earthquake Sequence and subsequent M5.6 Aftershock of June 2020. *Seismological Research Letters*, (in preparation).
- 11008 Ji, C., & Archuleta, R. J. (2022). A Source Physics Interpretation of Nonself-Similar Double-Corner-Frequency Source Spectral Model JA19_2S. *Seismological Research Letters*, 93(2A), 777-786.
- 11011 Bayona, J. A., Savran, W. H., Rhoades, D. A., & Werner, M. J. (2022). Prospective evaluation of multiplicative hybrid earthquake forecasting models in California. *Geophysical Journal International*, 229(3), 1736-1753.
- 11012 Avnaim-Katav, S., Garrett, E., Gehrels, W., Brown, L. N., Rockwell, T. K., Simms, A. R., Bentz, J. M., & MacDonald, G. M. (2021). Testing the applicability of a foraminifera-based transfer function for reconstructing late Holocene sea-level changes in southern California. *Quaternary Research*, (in preparation).
- 11017 Savran, W. H., Werner, M. J., Schorlemmer, D., & Maechling, P. J. (2022). pyCSEP: A Python Toolkit For Earthquake Forecast Developers. *Journal of Open Source Software*, 7(69).
- 11018 Kenawy, M., McCallen, D. B., & Pitarka, A. (2021). Variability of near-fault seismic risk to reinforced concrete buildings based on high-resolution physics-based ground motion simulations. *Earthquake Engineering & Structural Dynamics*, 50(6), 1713-1733.
- 11019 Thompson, G., Power, J., Braunmiller, J., Lockhart, A. B., Lynch, L., McCausland, W., Rowe, C. A., Shea, T. A., White, R. A., & Breithaupt, C. I. (2020). Capturing, Preserving, and Digitizing Legacy Seismic Data from the Montserrat Volcano Observatory Analog Seismic Network, July 1995–December 2004. *Seismological Research Letters*, 91(4), 2127-2140.
- 11022 Hirao, B., Savage, H., & Brodsky, E. E. (2021). Communication Between the Northern and Southern Central San Andreas Fault via Dynamically Triggered Creep. *Geophysical Research Letters*, 48(13).
- 11023 Lu, Y., & Ben-Zion, Y. (2022). Validation of seismic velocity models in southern California with full-waveform simulations. *Geophysical Journal International*, 229(2), 1232-1254.
- 11025 Cheng, Y., Wang, X., Zhan, Z., & Ben-Zion, Y. (2021). Isotropic Source Components of Events in the 2019 Ridgecrest, California, Earthquake Sequence. *Geophysical Research Letters*, 48(18).
- 11029 Im, K., Avouac, J., Heimisson, E. R., & Elsworth, D. (2021). Ridgecrest aftershocks at Coso suppressed by thermal destressing. *Nature*, 595(7865), 70-74.

- 11037 Abercrombie, R. E., Trugman, D. T., Shearer, P. M., Chen, X., Zhang, J., Pennington, C. N., Hardebeck, J. L., Goebel, T. W., & Ruhl, C. J. (2021). Does Earthquake Stress Drop Increase With Depth in the Crust?. *Journal of Geophysical Research: Solid Earth*, 126(10).
- 11063 Rodriguez Padilla, A. M., Quintana, M. A., Prado, R. M., Aguilar, B. J., Shea, T. A., Oskin, M. E., & Garcia, L. (2021). Near-Field High-Resolution Maps of the Ridgecrest Earthquakes from Aerial Imagery. *Seismological Research Letters*, 93(1), 494-499.
- 11108 Goulet, C. A., Wang, Y., Nweke, C. C., Tang, B., Wang, P., Hudson, K. S., Ahdi, S. K., Meng, X., Hudson, M. B., Donnellan, A., Lyzenga, G. A., Brandenberg, S. J., Stewart, J. P., Gallien, T., & Winters, M. A. (2021). Comparison of Near-Fault Displacement Interpretations from Field and Aerial Data for the M 6.5 and 7.1 Ridgecrest Earthquake Sequence Ruptures. *Bulletin of the Seismological Society of America*
- 11111 Field, E. H., Milner, K. R., & Luco, N. (2021). The Seismic Hazard Implications of Declustering and Poisson Assumptions Inferred from a Fully Time-Dependent Model. *Bulletin of the Seismological Society of America*, 112(1), 527-537.
- 11155 Thakur, P., & Huang, Y. (2021). Influence of Fault Zone Maturity on Fully Dynamic Earthquake Cycles. *Geophysical Research Letters*, 48(17).
- 11159 O'Reilly, O., Yeh, T., Olsen, K. B., Hu, Z., Breuer, A. N., Roten, D., & Goulet, C. A. (2021). A High-Order Finite-Difference Method on Staggered Curvilinear Grids for Seismic Wave Propagation Applications with Topography. *Bull. Seis. Soc. Am.*,.
- 11502 Hughes, A., Rood, D. H., DeVecchio, D. E., Whittaker, A. C., Bell, R. E., Wilcken, K. M., Corbett, L. B., Bierman, P. R., Swanson, B. J., & Rockwell, T. K. (2022). Tectonic controls on Quaternary landscape evolution in the Ventura basin, southern California, quantified using cosmogenic isotopes and topographic analyses. *Geological Society of America Bulletin*,.
- 11677 Field, E. H., Milner, K. R., Page, M. T., Savran, W. H., & van der Elst, N. J. (2021). Improvements to the Third Uniform California Earthquake Rupture Forecast ETAS Model (UCERF3-ETAS). *The Seismic Record*, 1(2), 117-125.
- 11679 Rodriguez Padilla, A. M., & Oskin, M. E. (2021). 738,000 Years of Off-fault Deformation at the Volcanic Tablelands, CA. *Geophysical Research Letters*, (in preparation).
- 11680 Jiang, J., Erickson, B. A., Lambert, V. R., Ampuero, J., Ando, R., Barbot, S. D., Cattania, C., Dal Zilio, L., Duan, B., Dunham, E. M., Gabriel, A., Lapusta, N., Li, D., Li, M., Liu, D., Liu, Y., Ozawa, S., Pranger, C., & van Dinther, Y. (2022). Community-Driven Code Comparisons for Three-Dimensional Dynamic Modeling of Sequences of Earthquakes and Aseismic Slip. *Journal of Geophysical Research: Solid Earth*, 127, e2021JB023519.
- 11681 Garcia, F. E., & Bray, J. (2018). Distinct element simulations of earthquake fault rupture through materials of varying density. *Soils and Foundations*, 58(4), 986-1000.
- 11682 Garcia, F. E., & Bray, J. (2018). Distinct Element Simulations of Shear Rupture in Dilatant Granular Media. *International Journal of Geomechanics*, 18(9).
- 11683 Garcia, F. E., & Bray, J. (2019). Modeling the shear response of granular materials with discrete element assemblages of sphere-clusters. *Computers and Geotechnics*, 106, 99-107.
- 11684 Garcia, F. E., & Bray, J. (2019). Discrete Element Analysis of Earthquake Fault Rupture-Soil-Foundation Interaction. *Journal of Geotechnical and Geoenvironmental Engineering*, 145(9).
- 11685 Garcia, F. E., & Bray, J. (2019). Discrete-Element Analysis of Influence of Granular Soil Density on Earthquake Surface Fault Rupture Interaction with Rigid Foundations. *Journal of Geotechnical and Geoenvironmental Engineering*, 145(11).
- 11688 Kelsey, H., Ladinsky, T., Staisch, L., Sherrod, B. L., Blakely, R. J., Pratt, T. L., Stephenson, W. J., Odum, J., & Wan, E. (2017). The Story of a Yakima Fold and How It Informs Late Neogene and Quaternary Backarc Deformation in the Cascadia Subduction Zone, Manastash Anticline, Washington, USA. *Tectonics*, 36(10), 2085-2107.

- 11696 O'Kane, A., & Copley, A. (2020). The Controls on Earthquake Ground Motion in Foreland-Basin Settings: The Effects of Basin and Source Geometry. *Geophysical Journal International*, 225(1), 512-529.
- 11708 Jacquey, A. B., Rattiez, H., & Veveakis, M. (2021). Strain localization regularization and patterns formation in rate-dependent plastic materials with multiphysics coupling. *Journal of the Mechanics and Physics of Solids*, 152.
- 11709 Jacquey, A. B., & Regenauer-Lieb, K. (2021). Thermomechanics for Geological, Civil Engineering and Geodynamic Applications: Rate-Dependent Critical State Line Models. *Rock Mechanics and Rock Engineering*,.
- 11710 Jacquey, A. B., Regenauer-Lieb, K., & Cacace, M. (2021). Thermomechanics for Geological, Civil Engineering and Geodynamic Applications: Numerical Implementation and Application to the Bentheim Sandstone. *Rock Mechanics and Rock Engineering*,.
- 11712 Salvage, R. O., & Eaton, D. W. (2021). Unprecedented quiescence in resource development area allows detection of long-lived latent seismicity. *Solid Earth*, 12(3), 765-783.
- 11716 Perea, H., Ucarus, G., Driscoll, N. W., Kent, G. M., Levy, Y., & Rockwell, T. K. (2021). Faulting and Folding of the Transgressive Surface Offshore Ventura Records Deformational Events in the Holocene. *Frontiers in Earth Science*, 9, 1-25.
- 11722 Nweke, C. C., Stewart, J. P., Graves, R. W., Goulet, C. A., & Brandenburg, S. J. (2022). Validating Predicted Site Response in Sedimentary Basins from 3D Ground Motion Simulations. *Earthquake Spectra*,.
- 11729 Yoshida, K., Hasegawa, A., Okada, T., Iinuma, T., Ito, Y., & Asano, Y. (2012). Stress before and after the 2011 great Tohoku-oki earthquake and induced earthquakes in inland areas of eastern Japan. *Geophysical Research Letters*, 39(3), n/a-n/a.
- 11730 Yoshida, K., & Hasegawa, A. (2018). Hypocenter Migration and Seismicity Pattern Change in the Yamagata-Fukushima Border, NE Japan, Caused by Fluid Movement and Pore Pressure Variation. *Journal of Geophysical Research: Solid Earth*, 123(6), 5000-5017.
- 11732 Yoshida, K., Noda, H., Nakatani, M., & Shibazaki, B. (2021). Backward earthquake ruptures far ahead of fluid invasion: Insights from dynamic earthquake-sequence simulations. *Tectonophysics*, 816.
- 11733 Yoshida, K. (2020). Detection of temporal change in near-source attenuation during intense fluid-driven seismicity following the 2011 Tohoku-Oki earthquake. *Geophysical Journal International*, 224(1), 138-150.
- 11734 Yoshida, K., Uchida, N., Hiarahara, S., Nakayama, T., Matsuzawa, T., Okada, T., Matsumoto, Y., & Hasegawa, A. (2020). 2019 M6.7 Yamagata-Oki earthquake in the stress shadow of 2011 Tohoku-Oki earthquake: Was it caused by the reduction in fault strength?. *Tectonophysics*, 793.
- 11735 Yoshida, K., Taira, T., Matsumoto, Y., Saito, T., Emoto, K., & Matsuzawa, T. (2020). Stress Release Process Along an Intraplate Fault Analogous to the Plate Boundary: A Case Study of the 2017 M5.2 Akita-Daisen Earthquake, NE Japan. *Journal of Geophysical Research: Solid Earth*, 125(5).
- 11736 Yoshida, K., Saito, T., Emoto, K., Urata, Y., & Sato, D. (2019). Rupture directivity, stress drop, and hypocenter migration of small earthquakes in the Yamagata-Fukushima border swarm triggered by upward pore-pressure migration after the 2011 Tohoku-Oki earthquake. *Tectonophysics*, 769.
- 11737 Yoshida, K. (2019). Prevalence of asymmetrical rupture in small earthquakes and its effect on the estimation of stress drop: a systematic investigation in inland Japan. *Geoscience Letters*, 6(1).
- 11739 Yu, E., Bhaskaran, A., Chen, S., Ross, Z. E., Hauksson, E., & Clayton, R. W. (2021). Southern California Earthquake Data Now Available in the AWS Cloud. *Seismological Research Letters*, 92(5), 3238-3247.
- 11740 Savran, W. H., Bayona, J. A., Iturrieta, P., Asim, K. M., Bao, H., Bayliss, K., Herrmann, M., Schorlemmer, D., Maechling, P. J., & Werner, M. J. (2022). pyCSEP: A Python Toolkit for

- Earthquake Forecast Developers. *Seismological Research Letters: Electronic Seismologist*, (submitted).
- 11741 Abercrombie, R. E., Chen, X., & Zhang, J. (2020). Repeating Earthquakes With Remarkably Repeatable Ruptures on the San Andreas Fault at Parkfield. *Geophysical Research Letters*, 47(23).
- 11743 Schulte-Pelkum, V., Becker, T. W., Behr, W. M., & Miller, M. S. (2021). Tectonic Inheritance During Plate Boundary Evolution in Southern California Constrained From Seismic Anisotropy. *Geochemistry, Geophysics, Geosystems*, 22(11), e2021GC010099.
- 11744 Williams, R., Rowe, C. D., Okamoto, K. K., Savage, H. M., & Eves, E. (2021). How Fault Rocks Form and Evolve in the Shallow San Andreas Fault. *Geochemistry, Geophysics, Geosystems*, 22(11).
- 11747 Gheibi, A., & Hedayat, R. (2020). Ultrasonic imaging of microscale processes in quartz gouge during compression and shearing. *Journal of Rock Mechanics and Geotechnical Engineering*,.
- 11750 Kyriakopoulos, C., Wu, B., & Oglesby, D. D. (2021). Asymmetric Topography Causes Normal Stress Perturbations at the Rupture Front: The Case of the Cajon Pass. *Geophysical Research Letters*, 48(20).
- 11752 Kim, J., Bahadori, A., & Holt, W. E. (2021). Crustal Strain Patterns Associated With Normal, Drought, and Heavy Precipitation Years in California. *Journal of Geophysical Research: Solid Earth*, 126(1).
- 11753 Kim, J., Holt, W. E., Bahadori, A., & Shen, W. (2021). Repeating Nontectonic Seasonal Stress Changes and a Possible Triggering Mechanism of the 2019 Ridgecrest Earthquake Sequence in California. *Journal of Geophysical Research: Solid Earth*, 126(10).
- 11755 Bahadori, A., & Holt, W. E. (2019). Geodynamic evolution of southwestern North America since the Late Eocene. *Nature Communications*, 10(1).
- 11756 Gallovic, F., Zahradnik, J., Plicka, V., Sokos, E., Evangelidis, C., Fountoulakis, I., & Turhan, F. (2020). Complex rupture dynamics on an immature fault during the 2020 Mw 6.8 Elazığ earthquake, Turkey. *Communications Earth & Environment*, 1(1).
- 11761 Zhou, Z., Bianco, M., Gerstoft, P., & Olsen, K. (2021). High-Resolution Imaging of Complex Shallow Fault Zones Along the July 2019 Ridgecrest Ruptures. *Geophysical Research Letters*, 49(1).
- 11767 Dominguez Ramirez, L. A., Sánchez-Sesma, J., & Davis, P. M. (2011). Scattering of Teleseismic Body Waves by the Lateral Crustal Heterogeneity at the Pacific Trench of Mexico. *Bulletin of the Seismological Society of America*, 101(3), 1281-1290.
- 11768 Dominguez Ramirez, L. A., Yildirim, B., Husker, A. L., Cochran, E. S., Christensen, C., Cruz-Atienza, V. M., & Lawrence, J. F. (2015). The Red Atrapa Sismos (Quake-Catcher Network in Mexico): Assessing Performance during Large and Damaging Earthquakes. *Seismological Research Letters*, 86(3), 848-855.
- 11769 Dominguez Ramirez, L. A., Taira, T., & Santoyo, M. A. (2016). Spatiotemporal variations of characteristic repeating earthquake sequences along the Middle America Trench in Mexico. *Journal of Geophysical Research: Solid Earth*, 121(12), 8855-8870.
- 11770 Meng, L., Huang, H., Xie, Y., Bao, H., & Dominguez Ramirez, L. A. (2019). Nucleation and Kinematic Rupture of the 2017 Mw 8.2 Tehuantepec Earthquake. *Geophysical Research Letters*, 46(7), 3745-3754.
- 11771 Legrand, D., Iglesias, A., Singh, S., Cruz-Atienza, V. M., Yoon, C., Dominguez Ramirez, L. A., Valenzuela, R., Suárez, G., & Castro-Artola, O. (2021). The influence of fluids in the unusually high-rate seismicity in the Ometepec segment of the Mexican subduction zone. *Geophysical Journal International*, 226(1), 524-535.

- 11774 Craig, M. S., Hayashi, K., & Kozaci, O. (2021). Active and passive seismic surface wave methods for levee assessment in the Sacramento–San Joaquin Delta, California, USA. *Near Surface Geophysics*, 19(2), 141-154.
- 11778 Kleber, E. J., DeVecchio, D. E., Arrowsmith, R., & Rittenour, T. M. (2021). Spatiotemporal Rates of Tectonic Deformation and Landscape Evolution above a Laterally Propagating Thrust Fault: Wheeler Ridge Anticline, California, USA. *Lithosphere*, 2021(Special 2).
- 11779 Kleber, E. J., McKean, A., Hiscock, A. I., Hylland, M. D., Hardwick, C. L., McDonald, G., Anderson, Z. W., Bowman, S., Willis, G. C., & Erickson, B. A. (2020). Geologic Setting, Ground Effects, and Proposed Structural Model for the 18 March 2020 Mw 5.7 Magna, Utah, Earthquake. *Seismological Research Letters*, 92(2A), 710-724.
- 11781 Hu, Z. (2022). 0-5 Hz Deterministic 3D Ground Motion Simulations for the 2014 La Habra, CA, Earthquake. *Geophysical Journal International*, (under review).
- 11782 Hu, Z. (2022). Calibration of the Near-surface Seismic Structure in the SCEC Community Velocity Model Version 4. *Geophysical Journal International*, (under review).
- 11783 Stanciu, A., & Humphreys, E. D. (2021). Seismic Architecture of the Upper Mantle Underlying California and Nevada. *Journal of Geophysical Research: Solid Earth*, 126(12).
- 11792 Nakata, N. (2021). Stochastic Analysis of Random Heterogeneity of Bathymetry at Gulf of Mexico. *Examines in Marine Biology and Oceanography*, 4(2), 000583.
- 11801 Zaliapin, I., & Ben-Zion, Y. (2021). Perspectives on Clustering and Declustering of Earthquakes. *Seismological Research Letters*, 93(1), 386-401.
- 11802 Sheng, Y., Kong, Q., & Beroza, G. C. (2021). Network analysis of earthquake ground motion spatial correlation: a case study with the San Jacinto seismic nodal array. *Geophysical Journal International*, 225(3), 1704-1713.
- 11820 Tanimoto, T., & Wang, J. (2021). Incorporating Wind Information in the Inversion of Co-Located Pressure and Seismic Data for Shallow Elastic Structure. *Journal of Geophysical Research: Solid Earth*, 126(5).
- 11828 Aati, S., Milliner, C., & Avouac, J. (2022). A new approach for 2-D and 3-D precise measurements of ground deformation from optimized registration and correlation of optical images and ICA-based filtering of image geometry artifacts. *Remote Sensing of Environment*, (under review).
- 11829 Milliner, C., Aati, S., & Avouac, J. (2022). Fault Friction Derived from Fault Bend Influence on Coseismic Slip During the 2019 Ridgecrest Earthquake. *J. Geophys. Res.*, (submitted).
- 11830 Bird, P. (2018). Ranking some global forecasts with the Kagan information score. *Seismological Research Letters*, 89(4), 1272-1276.
- 11839 Xu, X., Sandwell, D. T., Klein, E., & Bock, Y. (2021). Integrated Sentinel-1 InSAR and GNSS Time-Series Along the San Andreas Fault System. *Journal of Geophysical Research: Solid Earth*, 126(11).

Conference Paper/Presentation (1,584)

- 6252 Taborda, R., Khoshnevis, N., Azizzadeh-Roodpish, S., & Huda, M. (2017). Influence Of The Source, Seismic Velocity, And Attenuation Models On The Validation Of Ground Motion Simulations. Poster Presentation at 16 World Conference on Earthquake Engineering.
- 6571 Farris, A. C., & Onderdonk, N. W. (2017, 03). Quantifying Late Quaternary deformation in the Santa Maria Basin: A OSL, GPS and soil chronosequence based model for determining strath terrace deformation in the Zaca Creek drainage, Santa Barbara County. Poster Presentation at 2016 SCEC Annual Meeting.

- 6899 Ye, L., Kanamori, H., Lay, T., & Avouac, J. (2017, 05). Strike-slip Faulting Energy Release. Poster Presentation at 2016 SCEC Annual Meeting.
- 7219 Cheng, Y., & Chen, X. (2016, 12). Seismicity and source spectra analysis in Salton Sea Geothermal Field. Poster Presentation at AGU 2016.
- 7245 Jacobs, J., Howard, S., Forand, D. H., Dor, O., & Evans, J. P. (2006, 09). Field Guide to Exhumed Major Faults in Southern California. Oral Presentation at SCEC 2005 Meeting Field trip. .
- 7256 Ye, L., Avouac, J., & Lapusta, N. (2016, 12). Dynamic Stress Changes during the 2015 Gorkha, Nepal Earthquake. Oral Presentation at AGU Annual Meeting.
- 7257 Lay, T., Ye, L., Kanamori, H., & Avouac, J. (2016, 12). The 16 April 2016, Mw 7.8 Ecuador earthquake: a quasi-repeater of the 1942 Ms 7.5 earthquake and partial re-rupture of the 1906 Ms 8.6 Colombia-Ecuador earthquake. Oral Presentation at AGU Annual Meeting.
- 7268 Abercrombie, R. E., Shearer, P. M., & Trugman, D. T. (2017, 04). A comparison of different methods of calculating source spectra and stress drop in Southern California. Poster Presentation at Annual Meeting of the Seismological Society of America.
- 7278 Savran, W. H., Olsen, K. B., & Day, S. M. (2017, 04). Kinematic Rupture Generator Based on 3D Rough Fault Dynamic Rupture Simulations. Poster Presentation at Seismological Society of America.
- 7290 Johnson, C. W., Fu, Y., & Bürgmann, R. (2016, 10). Seasonal stress modulation on active California fault structures. Oral Presentation at State of stress in the Earth.
- 7298 Crouse, C., & Jordan, T. H. (2016, 10). Development of new ground-motion maps for Los Angeles based on 3-D numerical simulations and NGA West2 equations. Oral Presentation at 2016 California Strong Motion Instrumentation Program Annual Seminar.
- 7309 Sleep, N. H. (2017, 07). Earthquake cycles with dynamic weakening from flash melting with heterogeneous stress and near-fault anelastic strain. Poster Presentation at 2017 SCEC Annual Meeting.
- 7311 Hudnut, K. W., Wein, A. M., Cox, D. A., Perry, S. C., Porter, K. A., Johnson, L. A., & Strauss, J. A. (2017, 07). The HayWired Scenario — How can the San Francisco bay region bounce back better?. Oral Presentation at 2017 SCEC Annual Meeting.
- 7330 Spica, Z., Perton, M., Clayton, R. W., & Beroza, G. C. (2017, 07). Geometry of the Los Angeles Basin Using Full H/V Spectral Ratio Inversion. Poster Presentation at 2017 SCEC Annual Meeting.
- 7334 Hough, S. E., & Bilham, R. (2017, 07). Rocking the Boat: Poro-elastic Stress Change at Seismogenic Depth Associated with Oil Production in the Los Angeles Basin in the Early 20th Century. Poster Presentation at 2017 SCEC Annual Meeting.
- 7337 Xu, X., & Sandwell, D. T. (2017, 07). Line-of-Sight Velocity Map along the San Andreas Fault System from GPS and Sentinel-1 InSAR: Contribution to the SCEC Community Geodetic Model. Poster Presentation at 2017 SCEC Annual Meeting.
- 7345 Hardebeck, J. L. (2017, 07). Are the Stress Drops of Small Earthquakes Good Predictors of the Stress Drops of Larger Earthquakes?. Poster Presentation at 2017 SCEC Annual Meeting.
- 7346 Foster, K., Bradley, B. A., Wotherspoon, L., & McGann, C. R. (2017, 07). A data-driven V_s ,30 model for New Zealand engineering research & practice. Poster Presentation at 2017 SCEC Annual Meeting.
- 7347 Bowden, D. C., & Tsai, V. C. (2017, 07). The Site Response of Surface Waves. Poster Presentation at 2017 SCEC Annual Meeting.
- 7350 Marzocchi, W. (2017, 07). Progresses and challenges for Operational Earthquake Forecasting in Italy. Oral Presentation at 2017 SCEC Annual Meeting.
- 7351 Cochran, E. S., Kroll, K. A., Richards-Dinger, K. B., & Murray, K. D. (2017, 07). Permeability Changes Observed in the Arbuckle Group Coincident with Nearby Earthquake Occurrence. Poster Presentation at 2017 SCEC Annual Meeting.

- 7355 Evans, E. L. (2017, 07). Strategies for building community-based geodetic models of fault slip rates. Oral Presentation at 2017 SCEC Annual Meeting.
- 7357 Llenos, A. L., & Michael, A. J. (2017, 07). Space-time earthquake rate models for one-year hazard forecasts in Oklahoma. Poster Presentation at 2017 SCEC Annual Meeting.
- 7360 Gold, P. O., Behr, W. M., Rockwell, T. K., & Fletcher, J. M. (2017, 07). Quaternary Slip History for the Agua Blanca Fault, northern Baja California, Mexico. Poster Presentation at 2017 SCEC Annual Meeting.
- 7363 Chen, K., Liu, Z., & Song, T. (2017, 07). Toward a more robust tsunami early warning system: integration of real-time GPS, strong motion and teleseismic data for fast seismic source inversion. Poster Presentation at 2017 SCEC Annual Meeting.
- 7364 Gerstenberger, M. C., Rhoades, D. A., Christophersen, A., Fry, B., Wallace, L. M., McVerry, G., & Horspool, N. (2017, 07). Earthquake Forecasting in recent large events in New Zealand and the role of CSEP. Oral Presentation at 2017 SCEC Annual Meeting.
- 7367 Sahakian, V. J., Baltay, A. S., Hanks, T. C., Buehler, J., & Vernon, F. L. (2017, 07). Path and site effects in GMPEs: Incorporating crustal physical properties for region-specific ground motion estimation using small magnitude data from Southern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7370 Langridge, R. M., Villamor, P., Litchfield, N., Van Dissen, R. J., Clark, K., Ries, W., Kears, J., Little, T., Gerstenberger, M. C., Goned, T., & Response Team, t. (2017, 07). The 2016 Mw 7.8 Kaikoura Earthquake: Perspectives from Earthquake Geology into Seismic Hazard. Oral Presentation at 2017 SCEC Annual Meeting.
- 7374 Murray, J. R. (2017, 08). The impact of model prediction error in designing geodetic networks for crustal deformation applications. Poster Presentation at 2017 SCEC Annual Meeting.
- 7376 Xue, L., Bürgmann, R., & Shelly, D. R. (2017, 08). Frequency-Dependent Tidal Triggering of Low Frequency Earthquakes Near Parkfield, California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7378 Kroll, K. A., Richards-Dinger, K. B., Dieterich, J. H., & Oglesby, D. D. (2017, 08). 3D Simulations of Earthquakes on Parallel Offset Faults with Homogeneous Stress Conditions. Poster Presentation at 2017 SCEC Annual Meeting.
- 7379 Douilly, R., Oglesby, D. D., Cooke, M. L., & Beyer, J. L. (2017, 08). Dynamic Models of Earthquake Rupture along branch faults of the Eastern San Gorgonio Pass Region in CA using Complex Fault Structure. Poster Presentation at 2017 SCEC Annual Meeting.
- 7380 Jones, L. M. (2017, 08). Science in Society: Bridging the Gap. Oral Presentation at 2017 SCEC Annual Meeting.
- 7383 Wu, B., Oglesby, D. D., Ghosh, A., & LI, B. (2017, 08). Investigating the physics behind VLFs and LFs: analysis based on dynamic rupture models with ductile-like friction. Poster Presentation at 2017 SCEC Annual Meeting.
- 7386 Huang, Y. (2017, 08). The effects of segmented fault zones on earthquake rupture propagation and termination. Poster Presentation at 2017 SCEC Annual Meeting.
- 7388 Li, Z., & Peng, Z. (2017, 08). Stress- and structure-induced anisotropy in Southern California from two-decades of shear-wave splitting measurements. Poster Presentation at 2017 SCEC Annual Meeting.
- 7389 Kuo, S., Kitamura, M., & Kitajima, H. (2017, 08). Experimental Investigation on Poro-Elasto-Visco-Plastic Behavior of the Inner Accretionary Wedge Sediments at the Nankai Subduction Zone. Poster Presentation at 2017 SCEC Annual Meeting.
- 7391 Ma, K., & (TEM) team, T. (2017, 08). Taiwan Earthquake Model: PSHA and Scenario Hazard Map. Poster Presentation at 2017 SCEC Annual Meeting.
- 7392 Milliner, C. W., Bürgmann, R., Wang, T., Inbal, A., Bekaert, D., Liang, C., & Fielding, E. J. (2017, 08). Capturing Postseismic Processes of the 2016 Mw 7.1 Kumamoto Earthquake, Japan, Using Dense,

Continuous GPS and Short-repeat Time ALOS-2 InSAR Data: Implications for the Shallow Slip Deficit Problem . Poster Presentation at 2017 SCEC Annual Meeting.

7393 Skoumal, R., Patlan, E., Dawson, P. B., Kaven, J., & Hickman, S. H. (2017, 08). Microseismic events associated with the Oroville Dam spillway. Poster Presentation at 2017 SCEC Annual Meeting.

7394 Callaghan, S., Graves, R. W., Olsen, K. B., Cui, Y., Milner, K. R., Goulet, C. A., Maechling, P. J., & Jordan, T. H. (2017, 08). 10 years of CyberShake: Where are we now and where are we going with physics-based PSHA?. Oral Presentation at 2017 SCEC Annual Meeting.

7395 Johnson, C. W., Fu, Y., & Bürgmann, R. (2017, 08). Stress models of the annual hydrospheric, atmospheric, thermal, and tidal loading cycles on California faults: Perturbation of background stress and changes in seismicity. Poster Presentation at 2017 SCEC Annual Meeting.

7398 Lohman, R. B., Scott, C. P., & Jordan, T. E. (2017, 08). InSAR coherence time series - soil moisture as a proxy for alluvial fan age?. Poster Presentation at 2017 SCEC Annual Meeting.

7402 Rinkema, S., Oda, A. R., Narvaez-Colon, A. G., Rolón-Domena, K., Tantiwuttipong, P., Kala, E., Yu, J., Milner, K. R., Noriega, G. R., Pearson, J. K., & Jordan, T. H. (2017, 08). 2017 USEIT: SCEC-VDO Enhancement and Release. Poster Presentation at 2017 SCEC Annual Meeting.

7403 Troise, S. A., Bent, M. T., Hernandez, R. A., Cervantes, R. G., Hermosura, J., Martinez, M. D., Callaghan, S., Gilchrist, J. J., Pearson, J. K., Noriega, G. R., & Jordan, T. H. (2017, 08). 2017 UseIT: High Performance Computing Team. Poster Presentation at 2017 SCEC Annual Meeting.

7404 Loh, C. Y., Dorencz, O. J., Escanuela, A., Qualls, K. F., Milner, K. R., Jordan, T. H., Pearson, J. K., & Noriega, G. R. (2017, 08). 2017 UseIT: Probability Team. Poster Presentation at 2017 SCEC Annual Meeting.

7407 Dorencz, O. J., Hernandez, R., Midgley, A., Verna, R., Qualls, K. F., Rolón-Domena, K., Cervantes, R. G., Oda, A. R., Ballmann, J., Jordan, T. H., Pearson, J. K., & Noriega, G. R. (2017, 08). 2017 UseIT: Communications Work Group. Poster Presentation at 2017 SCEC Annual Meeting.

7405 Li, Y., Belvoir, S., Edwards, A., Midgley, A., Uribe, R., Verna, R., Pearson, J. K., Jordan, T. H., Noriega, G. R., Milner, K. R., & Seligson, H. A. (2017, 08). 2017 USEIT: Hazard and Risk Visualization of Earthquake Scenarios . Poster Presentation at 2017 SCEC Annual Meeting.

7409 Wirth, E., Frankel, A., Vidale, J. E., Marafi, N., & Stephenson, W. J. (2017, 08). 3-D Simulations of M9 Earthquakes on the Cascadia Megathrust. Poster Presentation at 2017 SCEC Annual Meeting.

7415 Share, P., Ben-Zion, Y., Thurber, C. H., Zhang, H., & Guo, H. (2017, 08). Seismic imaging of the southern California plate-boundary around the South-Central Transverse Ranges using double-difference tomography. Poster Presentation at 2017 SCEC Annual Meeting.

7416 Wang, K., & Fialko, Y. (2017, 08). Postseismic deformation following the 2013 Mw 7.7 Balochistan (Pakistan) earthquake observed with Sentinel-1 Interferometry. Poster Presentation at 2017 SCEC Annual Meeting.

7420 Lin, J. C., Moon, S., Yong, A., Meng, L., Martin, A., & Davis, P. M. (2017, 08). Linking Subsurface and Surface Processes: Insights on Vs30 Distribution in Southern California. Poster Presentation at 2017 SCEC Annual Meeting.

7425 Baker, J. W., & Chen, Y. (2017, 08). Characterization of spatial correlations in ground motions—insights from physics-based simulations. Oral Presentation at 2017 SCEC Annual Meeting.

7427 Taciroglu, E. (2017, 08). A Vision for Regional Performance-Based Seismic Assessment. Oral Presentation at 2017 SCEC Annual Meeting.

7430 Halkia, G., & Grant Ludwig, L. (2017, 08). Newspaper Media Content Analysis: Community Effects of Induced Seismicity in Oklahoma. Poster Presentation at 2017 SCEC Annual Meeting.

7434 Roh, B., Buyco, K., & Heaton, T. H. (2017, 08). NGA high-pass filters remove important real signals; simple tilt correction is preferable when predicting collapse.. Poster Presentation at 2017 SCEC Annual Meeting.

- 7436 Retailleau, L., & Beroza, G. C. (2017, 08). Towards Structural Imaging Using Scattering Artifacts Detected in Ambient Field Correlations. Poster Presentation at 2017 SCEC Annual Meeting.
- 7438 McDermott, R., Ault, A. K., & Evans, J. P. (2017, 08). Examining earthquake processes with microtextural analysis and (U-Th)/He thermochronometry: a case study from hematite fault mirrors in the Wasatch fault zone. Poster Presentation at 2017 SCEC Annual Meeting.
- 7440 Swiatlowski, J. L., Moore, D., & Lockner, D. A. (2017, 08). Frictional strengths of fault gouge from a creeping segment of the Bartlett Springs Fault, northern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7441 Clayton, R. W., Lin, F., Denolle, M. A., Persaud, P., & Polet, J. (2017, 08). Imaging the San Gabriel and San Bernardino Basins with short-term Nodal deployments. Poster Presentation at 2017 SCEC Annual Meeting.
- 7442 Khoshnevis, N., & Taborda, R. (2017, 09). Towards an Informed Decision Making in Validation Metrics. Oral Presentation at QuakeCoRE Annual Meeting.
- 7443 Jackson, D. D. (2017, 08). Prospective test of the 1995 WGCEP SoCal earthquake forecast . Poster Presentation at 2017 SCEC Annual Meeting.
- 7444 Ellsworth, W. L., Boettcher, M. S., & Ogasawara, H. (2017, 08). A Test Case for the Source Inversion Validation: The 2014 ML 5.5 Orkney, South Africa Earthquake. Poster Presentation at 2017 SCEC Annual Meeting.
- 7445 Xie, Y., & Meng, L. (2017, 08). Application of array-based early warning system to tsunامي offshore Ventura, California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7446 Lee, R. L., Bradley, B. A., Graves, R. W., Rodriguez-Marek, A., & Stafford, P. J. (2017, 08). Investigation of Systematic Ground Motion Effects Through Ground Motion Simulation of Small-to-Moderate Magnitude Earthquakes in the Canterbury, New Zealand Region. Poster Presentation at 2017 SCEC Annual Meeting.
- 7449 Bao, X., & Song, X. (2017, 08). Crust azimuthal anisotropy beneath the eastern Tibetan Plateau revealed by ambient noise tomography. Poster Presentation at 2017 SCEC Annual Meeting.
- 7455 Brune, J. N., Anderson, J. G., & Brune, R. J. (2017, 08). Additional Interpretation of the Orientations of Precariously Balanced Rocks in the Band Between the San Jacinto and Elsinore Faults. Poster Presentation at 2017 SCEC Annual Meeting.
- 7456 Bruhat, L., & Segall, P. (2017, 08). Can deformation rates across the Carrizo Plain segment of the San Andreas Fault be explained by vertical migration of the locked to-creeping transition? . Poster Presentation at 2017 SCEC Annual Meeting.
- 7457 Abolfathian, N., Martínez-Garzón, P., & Ben-Zion, Y. (2017, 08). Spatio-temporal variations of stress parameters in the San Jacinto Fault Zone. Poster Presentation at 2017 SCEC Annual Meeting.
- 7458 Shaw, B. E., Milner, K. R., Field, E. H., Richards-Dinger, K. B., Gilchrist, J. J., Dieterich, J. H., & Jordan, T. H. (2017, 08). Striking agreement of physics-based earthquake simulator and UCERF3 California seismic hazard model. Poster Presentation at 2017 SCEC Annual Meeting.
- 7460 Wang, K., Ellsworth, W. L., & Beroza, G. C. (2017, 08). Reanalyzing the Rangely earthquake control experiment using machine learning . Poster Presentation at 2017 SCEC Annual Meeting.
- 7461 Lifton, N. (2017, 08). A new, 170 ka slip rate estimate on the Sierra Madre Fault. Poster Presentation at 2017 SCEC Annual Meeting.
- 7462 Cheng, Y., Ross, Z. E., & Ben-Zion, Y. (2017, 08). Diverse volumetric seismicity in the Trifurcation area of the San Jacinto fault zone . Poster Presentation at 2017 SCEC Annual Meeting.
- 7463 Goebel, T. H., Kwiatek, G., Becker, T. W., Brodsky, E. E., & Dresen, G. (2017, 08). What allows seismic events to grow big?: Insights from b-value and fault roughness analysis in laboratory stick-slip experiments. Poster Presentation at 2017 SCEC Annual Meeting.

- 7465 Kalkan, E., Jones, J., Stephens, C., & Ng, P. (2017, 08). PRISM, Processing and Review Interface for Strong Motion Data Software. Poster Presentation at 2017 SCEC Annual Meeting.
- 7468 Eymold, W. K., & Jordan, T. H. (2017, 08). Objective Tectonic Regionalization of CVM-S4.26 Using the k-means Clustering Algorithm. Poster Presentation at 2017 SCEC Annual Meeting.
- 7469 Ogata, Y. (2017, 08). On secular spatial seismicity. Poster Presentation at 2017 SCEC Annual Meeting.
- 7471 Gong, J., & McGuire, J. J. (2017, 08). Interactions Between Strike-slip Earthquakes and the Subduction Interface near the Mendocino Triple Junction. Poster Presentation at 2017 SCEC Annual Meeting.
- 7473 Schoenball, M., & Ellsworth, W. L. (2017, 08). A systematic assessment of the spatio-temporal evolution of fault activation through induced seismicity in Oklahoma and southern Kansas. Poster Presentation at 2017 SCEC Annual Meeting.
- 7477 Page, M. T., van der Elst, N. J., & Shaw, B. E. (2017, 08). Characterizing the Triggering Susceptibility of Characteristic Faults. Poster Presentation at 2017 SCEC Annual Meeting.
- 7478 Taylor, S. E., & Brodsky, E. E. (2017, 08). Granular Temperature Measured Experimentally in a Shear Flow by Acoustic Energy. Poster Presentation at 2017 SCEC Annual Meeting.
- 7488 Zhang, Y., Yang, J., & Xie, F. (2017, 08). Stress patterns analysis about the seismic focal zone of the great Tohoku-Oki earthquake (M=9.0) in the Japan Trench subduction zone. Poster Presentation at 2017 SCEC Annual Meeting.
- 7490 Reynolds, L. C., Simms, A. R., Rockwell, T. K., Yokoyama, Y., Miyairi, Y., & Hangsterfer, A. (2017, 08). Evidence for Holocene coseismic subsidence during a non- plate boundary earthquake. Poster Presentation at 2017 SCEC Annual Meeting.
- 7493 Wilson, J. M., Rundle, J. B., Ward, S., Donnellan, A., Song, T., Komjathy, A., & Savastano, G. (2017, 08). Tsunami Squares: fast tsunami computation for use in coupled earthquake, tsunami, and ionosphere simulations. Poster Presentation at 2017 SCEC Annual Meeting.
- 7494 Luginbuhl, M., Turcotte, D. L., & Rundle, J. B. (2017, 08). Natural Time and Nowcasting Induced Seismicity at the Groningen Gas Field in the Netherlands. Poster Presentation at 2017 SCEC Annual Meeting.
- 7495 Motamed, R., Saxena, S., & Anderson, J. G. (2017, 08). Using Spatial Variation of kappa to Develop Site-Specific Attenuation Model for Improved Broadband Simulations. Poster Presentation at 2017 SCEC Annual Meeting.
- 7496 Chourasia, A., Nadeau, D. R., & Norman, M. L. (2017, 08). SeedMe: Data Sharing Building Blocks. Poster Presentation at 2017 SCEC Annual Meeting.
- 7497 Kedar, S., Bock, Y., Moore, A. W., Fang, P., Sullivan, A., Argus, D. F., Jiang, S., & Marshall, S. T. (2017, 08). Production and Uses of Multi-Decade Geodetic Earth Science Data Records. Poster Presentation at 2017 SCEC Annual Meeting.
- 7500 Rubinstein, J. L., & Ellsworth, W. L. (2017, 08). Repeating Earthquakes Trigger Themselves in Parkfield. Poster Presentation at 2017 SCEC Annual Meeting.
- 7501 Patyniak, M., Landgraf, A., Dzhumabaeva, A., Abdrakhmatov, K., Rosenwinkel, S., Korup, O., Preusser, F., Fohlmeister, J., Arrowsmith, R., & Strecker, M. (2017, 08). Paleoseismic Record of Three Holocene Earthquakes Rupturing the Issyk-Ata Fault near Bishkek, North Kyrgyzstan. Poster Presentation at 2017 SCEC Annual Meeting.
- 7504 Juarez, A., & Jordan, T. (2017, 08). Automated Waveform Assembling for Full-3D Tomography. Poster Presentation at 2017 SCEC Annual Meeting.
- 7506 Ross, Z. E., Kanamori, H., & Hauksson, E. (2017, 08). Anomalously large complete stress drop during the 2016 Mw 5.2 Borrego Springs earthquake inferred by waveform modeling and near-source aftershock deficit. Poster Presentation at 2017 SCEC Annual Meeting.

- 7507 Sandwell, D. T., & Smith-Konter, B. R. (2017, 08). A 4-D Earthquake Cycle Model with Lateral Variations in Shear Modulus. Poster Presentation at 2017 SCEC Annual Meeting.
- 7510 Morell, K. D., Regalla, C. A., Amos, C. B., Bennett, S. E., Graham, A., Leonard, L., Lynch, E., & Harrichhausen, N. (2017, 08). Lidar data, geologic mapping, and paleoseismic trenching reveal late Quaternary surface ruptures and increased seismic hazard in southwestern British Columbia, Canada. Poster Presentation at 2017 SCEC Annual Meeting.
- 7513 Gheibi, A., & Hedayat, A. (2017, 08). Laboratory geophysical observation of grain compression and crushing in synthetic fault gouges. Poster Presentation at 2017 SCEC Annual Meeting.
- 7517 Shinevar, W., Behn, M., Hirth, G., & Jagoutz, O. (2017, 08). Inferring Crustal Viscosity from Seismic Wavespeeds: Applications to the Rheologic Structure of Southern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7520 Oskin, M. E., Behr, W. M., Morelan, A. E., Plesch, A., & Shaw, J. H. (2017, 08). Toward a Geologic Framework for the Community Rheology Model, with focus on the Mojave region. Poster Presentation at 2017 SCEC Annual Meeting.
- 7502 Fuis, G. S., Zhang, E., Catchings, R. D., Scheirer, D. S., Goldman, M. R., & Bauer, K. (2017, 08). A re-examination of the subsurface fault structure in the vicinity of the 1989 Loma Prieta Mw 6.9 earthquake, central California, from analysis of steep reflections, earthquakes, and potential-field data. Poster Presentation at 2017 SCEC Annual Meeting.
- 7527 Huang, H., & Meng, L. (2017, 08). Large-scale Acceleration of Slow Slip Before the 2015 Mw 8.4 Illapel, Chile Earthquake. Poster Presentation at 2017 SCEC Annual Meeting.
- 7528 Mousavi, M., & Beroza, G. C. (2017, 08). Towards Testing Probabilistic Seismic Hazard Estimates. Poster Presentation at 2017 SCEC Annual Meeting.
- 7522 Sheng, Y., Nakata, N., & Beroza, G. C. (2017, 08). On the Properties of Higher-Order Ambient Field Correlation. Poster Presentation at 2017 SCEC Annual Meeting.
- 7529 White, M. C., Ross, Z. E., Ben-Zion, Y., & Vernon, F. L. (2017, 08). A detailed, automatically-derived, seismicity catalog for the San Jacinto fault zone (1998-2016). Poster Presentation at 2017 SCEC Annual Meeting.
- 7533 Guns, K. A., Bennett, R. A., & Blisniuk, K. D. (2017, 08). Investigating strain transfer along the Southern San Andreas Fault: A geomorphic and geodetic study of block rotation in the Eastern Transverse Ranges, Joshua Tree National Park, CA. Poster Presentation at 2017 SCEC Annual Meeting.
- 7534 Beyer, J. L., Cooke, M. L., & Marshall, S. T. (2017, 08). Getting pushy with the San Geronio Pass: Investigating active fault geometries with crustal deformation models. Poster Presentation at 2017 SCEC Annual Meeting.
- 7537 Louie, J. N., Boudjema, M., Dunn, M., & Kent, G. M. (2017, 08). Ground-Motion Variance from Modeling of Multiple Rupture-Directivity Scenarios on the Newport-Inglewood/Rose Canyon Fault System. Poster Presentation at 2017 SCEC Annual Meeting.
- 7538 Trugman, D. T., & Shearer, P. M. (2017, 08). Examining the relationship between stress drop and peak ground acceleration for small-to-moderate earthquakes in the San Francisco Bay Area. Poster Presentation at 2017 SCEC Annual Meeting.
- 7539 Yano, T. E., & Matsubara, M. (2017, 08). Seismogenic depth of the crust beneath the Japanese Island using Japan unified high-resolution relocated catalog for earthquakes (JUICE). Poster Presentation at 2017 SCEC Annual Meeting.
- 7540 Callaghan, S., Juve, G., Vahi, K., Maechling, P. J., Jordan, T. H., & Deelman, E. (2017, 08). rvGAHP - Push-based job submission using reverse SSH connections. Oral Presentation at International Conference for High Performance Computing, Networking, Storage and Analysis (SC 2017).
- 7543 Wang, W., & Shearer, P. M. (2017, 08). An Improved Method to Determine Coda-Q, Earthquake Magnitude, and Site Amplification: Theory and Application to Southern California. Poster Presentation at 2017 SCEC Annual Meeting.

- 7544 Kilb, D., Borsa, A. A., & Agnew, D. C. (2017, 08). On the Geodetic Signature from Lake Mead Water Levels Fluctuations (1940-2016). Poster Presentation at 2017 SCEC Annual Meeting.
- 7545 Zhang, D., & Clayton, R. W. (2017, 08). Near-Surface Shear-Wave Velocities determined using the Community Seismic Network (CSN) . Poster Presentation at 2017 SCEC Annual Meeting.
- 7546 Elizondo, K. Q., & Polet, J. (2017, 08). Measurements of Tilt from Triangular Bench Mark Arrays Installed Within Long Valley Caldera in the 1980s . Poster Presentation at 2017 SCEC Annual Meeting.
- 7547 Wesnousky, S. G., & Biasi, G. P. (2017, 08). A predictive model for earthquake rupture extents given an early warning epicenter. Poster Presentation at 2017 SCEC Annual Meeting.
- 7548 Evans, J. P., Borhara, K., & Webb, S. (2017, 08). Earthquake Petrology: Insights into Fault Slip Localization and Fault Heating via Micro X-Ray Fluorescence Mapping and X-Ray Absorption Near Edge Spectroscopy. Poster Presentation at 2017 SCEC Annual Meeting.
- 7550 Wang, J., & Tanimoto, T. (2017, 08). Shallow Earth Structure from Wind-Induced Ground Motion. Poster Presentation at 2017 SCEC Annual Meeting.
- 7551 Todd, E. (2017, 08). Seismicity and tectonic tremor associated with shallow offshore slow slip along the northern Hikurangi Margin, New Zealand. Poster Presentation at 2017 SCEC Annual Meeting.
- 7553 Teng, G., & Baker, J. W. (2017, 08). Evaluations of CyberShake simulated motions for use in engineering analysis. Poster Presentation at 2017 SCEC Annual Meeting.
- 7555 Liu, Q., Wen, X., & Shao, Z. (2017, 08). Seismogenic structure and coseismic slip distribution of the 2013 Ms7.0 Lushan earthquake in southwestern China. Poster Presentation at 2017 SCEC Annual Meeting.
- 7554 Anderson-Merritt, E., Cowgill, E. S., Scharer, K. M., & Keen-Zebert, A. (2017, 08). Preliminary paleoslip results from the Pearblossom site on the Mojave section of the San Andreas Fault. Poster Presentation at 2017 SCEC Annual Meeting.
- 7557 Böse, M., Smith, D. E., Felizardo, C., Meier, M., Heaton, T. H., & Clinton, J. (2017, 08). Rapid Line-Source and Ground-Motion Estimates for Earthquake Early Warning Using FinDer Version 2. Poster Presentation at 2017 SCEC Annual Meeting.
- 7561 Bradley, B. A., Savarimuthu, S., Lagrava, D., Huang, J., Motha, J., Polak, V., & Bae, S. (2017, 08). SeisFinder: A web application for extraction of data from computationally-intensive earthquake resilience calculations. Poster Presentation at 2017 SCEC Annual Meeting.
- 7562 Jeong, S., Mohammadi, K., Asimaki, D., & Bradley, B. A. (2017, 08). Simulation and Validation of Topographic Effects on Mt Pleasant, Christchurch, New Zealand. Poster Presentation at 2017 SCEC Annual Meeting.
- 7564 McGuire, J. J., & Kaneko, Y. (2017, 08). Directly Estimating Rupture Area to Remove the Uncertainty in Stress Drop. Poster Presentation at 2017 SCEC Annual Meeting.
- 7565 Nakata, N., & Beroza, G. C. (2017, 08). Towards a High-Resolution Velocity Model with a Very Dense Array at Diablo Canyon, California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7566 Shearer, P. M., Abercrombie, R. E., & Trugman, D. T. (2017, 08). Testing and Reconciling Stress Drop and Attenuation Models for Southern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7570 Inbal, A., Kong, Q., Allen, R. M., & Savran, W. H. (2017, 08). Earthquake Monitoring with the MyShake Global Smartphone Seismic Network. Poster Presentation at 2017 SCEC Annual Meeting.
- 7569 Glasscoe, M. T., Parker, J. W., & Donnellan, A. (2017, 08). Characterizing fault motion using edge detection in radar images. Poster Presentation at 2017 SCEC Annual Meeting.
- 7576 Ault, A. K., McDermott, R. G., Moser, A. C., & Evans, J. P. (2017, 08). Hematite nano- to micro-textures and (U-Th)/He thermochronometry inform seismic and aseismic fault damage zone processes. Poster Presentation at 2017 SCEC Annual Meeting.

- 7579 Khoshnevis, N., & Taborda, R. (2017, 08). An application of machine learning techniques to the evaluation of goodness-of-fit scores used in earthquake ground motion validation. Poster Presentation at 2017 SCEC Annual Meeting.
- 7580 Withers, K. B., & Moschetti, M. P. (2017, 08). 3D Dynamic Rupture Simulations along Dipping Faults, with a focus on the Wasatch Fault Zone, Utah. Poster Presentation at 2017 SCEC Annual Meeting.
- 7581 Qin, L., Ben-Zion, Y., & Vernon, F. L. (2017, 08). Ground motion coherence study in multiple distance ranges and frequency bands. Poster Presentation at 2017 SCEC Annual Meeting.
- 7583 Hirakawa, E. T., & Ma, S. (2017, 08). Effect of Undrained Gouge Plasticity on Rupture Dynamics of Rough Faults. Poster Presentation at 2017 SCEC Annual Meeting.
- 7578 Field, E. H., & WGCEP Participants, . (2017, 08). An Overview of the 3rd Uniform California Earthquake Rupture Forecast (UCERF3). Poster Presentation at 2017 SCEC Annual Meeting.
- 7590 Buyco, K., & Heaton, T. (2017, 08). 70%-damped spectral acceleration as a ground motion intensity measure for predicting highly nonlinear response of structures. Poster Presentation at 2017 SCEC Annual Meeting.
- 7582 Aslam, K., & Daub, E. G. (2017, 08). Modelling the spatio-temporal pattern of heterogeneous stresses and strain accumulation due to earthquake rupture on a geometrically complex fault. Poster Presentation at 2017 SCEC Annual Meeting.
- 7595 Hatem, A. E., & Dolan, J. F. (2017, 08). A model for the initiation, evolution and continued activity of the Garlock fault, California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7596 Pekurovsky, D., Chourasia, A., Richards-Dinger, K. B., Shaw, B. E., Dieterich, J. H., & Cui, Y. (2017, 08). Performance enhancements and visualization for RSQSim earthquake simulator. Poster Presentation at 2017 SCEC Annual Meeting.
- 7604 Meng, H., Ben-Zion, Y., & McGuire, J. J. (2017, 08). Towards quasi-automated estimates of directivity and related source properties of small to moderate earthquakes with second seismic moments. Poster Presentation at 2017 SCEC Annual Meeting.
- 7601 Denolle, M. A., Boué, P., Beroza, G. C., & Hirata, N. (2017, 08). Seismic noise based ground motion: strong shaking predicted in Tokyo for the next M7+ earthquake on the Itoigawa-Shizuoka tectonic line.. Poster Presentation at 2017 SCEC Annual Meeting.
- 7609 Dorsett, J. H., Marshall, S. T., Madden, E. H., & Cooke, M. L. (2017, 08). Mechanical Models of Fault Slip Rates in the Imperial Valley, CA. Poster Presentation at 2017 SCEC Annual Meeting.
- 7610 da Silva, R. F., Callaghan, S., & Deelman, E. (2017, 08). On the use of burst buffers for accelerating data-intensive scientific workflows. Oral Presentation at International Conference for High Performance Computing, Networking, Storage and Analysis (SC 2017).
- 7614 Yu, C., Hauksson, E., Zhan, Z., & Cochran, E. S. (2017, 08). Depth Distribution of the 2010 El Mayor-Cucapah Earthquake Sequence ($M \geq 4$) Determined from Regional Waveform Modeling. Poster Presentation at 2017 SCEC Annual Meeting.
- 7611 Silva, F., Maechling, P. J., Goulet, C. A., & Jordan, T. (2017, 08). The SCEC Broadband Platform: Open-Source Software for Strong Ground Motion Simulation and Validation. Poster Presentation at 2017 SCEC Annual Meeting.
- 7617 Hauksson, E., & Meier, M. (2017, 08). Applying Paleo-earthquake Data to Query for Earthquake Gate Areas. Oral Presentation at 2017 SCEC Annual Meeting.
- 7615 Quackenbush, P., West, J., Clark, M., Zekkos, D., & Deepak, C. (2017, 08). Tectonic control on landsliding in the nepal himalaya revealed by the 2015 gorkha earthquake. Poster Presentation at 2017 SCEC Annual Meeting.

- 7597 Evans, W. S., Plesch, A., Lee, W., Pillai, N., Shaw, J. H., Meier, M., & Hauksson, E. (2017, 08). Implementing rapid, probabilistic association of earthquakes with source faults in the CFM for southern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7624 Giguere, A. (2017, 08). Natural Time and Earthquake Aftershock Entropy. Poster Presentation at 2017 SCEC Annual Meeting.
- 7623 Scharer, K. M., Burgette, R. J., Hanson, A., Lifton, N., Rittenour, T. M., & McPhillips, D. (2017, 08). Slip rate variation of the Central Sierra Madre fault, southern California over the past 200 ka. Poster Presentation at 2017 SCEC Annual Meeting.
- 7625 Rezaeian, S., Sun, X., Clayton, B., & Hartzell, S. (2017, 08). Estimation of Ground Motion Variability in the CEUS. Poster Presentation at 2017 SCEC Annual Meeting.
- 7607 Minson, S. E., Baltay, A. S., Cochran, E. S., Hanks, T. C., & Meier, M. (2017, 08). The Limits of Earthquake Early Warning. Oral Presentation at 2017 SCEC Annual Meeting.
- 7628 Gilchrist, J. J., Jordan, T. H., Shaw, B. E., Milner, K. R., Richards-Dinger, K. B., & Dieterich, J. H. (2017, 08). Conditional Probabilities of Large Earthquake Sequences in California from the Physics-based Rupture Simulator RSQSim. Poster Presentation at 2017 SCEC Annual Meeting.
- 7620 Hauksson, E., Meier, M., & Ross, Z. E. (2017, 08). Can the Depth Distribution of Seismicity be Applied to Probe the Rheology of the Seismogenic Crust in Southern California?. Poster Presentation at 2017 SCEC Annual Meeting.
- 7631 Levy, Y., Rockwell, T. K., Shaw, J. H., Plesch, A., Driscoll, N. W., & Perea, H. (2017, 08). Structural Architecture of the Western Transverse Ranges and Potential for Large Earthquakes – Trishear Forward Models . Poster Presentation at 2017 SCEC Annual Meeting.
- 7633 Borhara, K., Bradbury, K. K., & Evans, J. P. (2017, 08). Carbonaceous fault-related rocks in SAFOD Phase III core: Indicators of fluid-rock interaction and structural diagenesis during slip. Poster Presentation at 2017 SCEC Annual Meeting.
- 7636 Hernandez, A., Persaud, P., Bauer, K., Stock, J. M., Fuis, G. S., Hole, J. A., & Goldman, M. R. (2015, 09). Profile of Shallow Crustal Structure across the San Andreas Fault Zone, Coachella Valley based on Controlled-Source Data from the Salton Seismic Imaging Project (SSIP). Poster Presentation at SCEC Annual Meeting.
- 7599 Yu, E., Acharya, P., Bhaskaran, A., Chen, S., Andrews, J. R., Thomas, V., Hauksson, E., & Clayton, R. W. (2017, 08). Obspy, Web Services and Big Data – Using the Southern California Earthquake Data Center (SCEDC) and the Southern California Seismic Network (SCSN) Products and Services for Earthquake Research. Poster Presentation at 2017 SCEC Annual Meeting.
- 7639 Han, J., & Meng, L. (2017, 08). Time Reversal Imaging of the 2014 Iquique Tsunami Source. Poster Presentation at 2017 SCEC Annual Meeting.
- 7629 Miranda, E., Stewart, C., & Lourcey, K. (2017, 08). Grain boundary sliding triggers coeval pseudotachylyte development in brittle-ductile transition mylonites: an Electron Backscatter Diffraction (EBSD) case study of mid-crustal interseismic and coseismic deformation. Poster Presentation at 2017 SCEC Annual Meeting.
- 7641 Perea, H., Ucakus, G., Driscoll, N. W., Kent, G. M., Levy, Y., & Rockwell, T. K. (2017, 08). New high-resolution seismic data reveals the Holocene active structures and deformation events in offshore Ventura basin, CA. Poster Presentation at 2017 SCEC Annual Meeting.
- 7642 Luttrell, K. M., & Hardebeck, J. L. (2017, 08). Borehole Breakouts Versus Earthquake Focal Mechanisms as Stress Field Orientation Indicators in Southern California: Should We Agree to Disagree?. Poster Presentation at 2017 SCEC Annual Meeting.
- 7638 Onderdonk, N. W., Farris, A., Tyler, E., Pytlewski, A. M., Garcia, A., & Mahan, S. A. (2017, 08). Strath terraces in the Santa Ynez Valley suggest late Quaternary activity on a detachment fault beneath the Western Transverse Ranges, California. Poster Presentation at 2017 SCEC Annual Meeting.

- 7644 Breuer, A. N., Heinecke, A., & Cui, Y. (2017, 08). Fused Seismic Simulations with the Discontinuous Galerkin Method at Extreme-Scale. Poster Presentation at 2017 SCEC Annual Meeting.
- 7646 Ajala, R., Persaud, P., Stock, J. M., Fuis, G. S., Hole, J. A., Goldman, M. R., & Scheirer, D. S. (2017, 08). 3-D Velocity Model of the Coachella Valley Determined Using P-Wave First Arrival Times from the Salton Seismic Imaging Project and Local Earthquakes. Poster Presentation at 2017 SCEC Annual Meeting.
- 7652 Schulte-Pelkum, V., Mueller, K., Brownlee, S. J., Becker, T. W., & Mahan, K. H. (2017, 08). Constraints on seismic anisotropy in ductile rock fabric and application to imaging fault roots in southern California . Poster Presentation at 2017 SCEC Annual Meeting.
- 7654 Dougherty, S. L., Cochran, E. S., & Harrington, R. M. (2017, 08). Large-N array observations of injection-induced seismicity in northern Oklahoma: the LASSO experiment. Poster Presentation at 2017 SCEC Annual Meeting.
- 7653 Shelly, D. R. (2017, 08). A 15-year catalog of more than 1 million low-frequency earthquakes: tracking tremor and slip along the deep San Andreas Fault. Poster Presentation at 2017 SCEC Annual Meeting.
- 7655 Kraner, M. L., Hammond, W. C., Kreemer, C., & Zaliapin, I. (2017, 08). Seasonal Variation of Strain in Central California and its Correlation with Seismicity. Poster Presentation at 2017 SCEC Annual Meeting.
- 7656 Gonzalez-Ortega, A., Vidal-Villegas, A., Ramon Morales, E., Valdez, A., & Arregui Ojeda, S. M. (2017, 08). Red Geodesica del Noroeste de Mexico (REGNOM) in northern Baja California.. Poster Presentation at 2017 SCEC Annual Meeting.
- 7657 Bydlon, S. A., Withers, K. B., & Dunham, E. M. (2017, 08). A Ground Motion Prediction Equation for Earthquakes Mw 4-6 in Oklahoma and Kansas Derived from a Composite Recorded/Simulated Ground Motion Catalog. Poster Presentation at 2017 SCEC Annual Meeting.
- 7661 Roten, D., Olsen, K. B., & Day, S. M. (2017, 08). Off-fault deformations and shallow slip deficit from dynamic rupture simulations with fault zone plasticity. Poster Presentation at 2017 SCEC Annual Meeting.
- 7667 Zhuang, J., Guo, Y., Murru, M., Falcone, G., & Tinti, E. (2017, 08). Clustering features of seismicity in Italy during 2005 to 2016. Poster Presentation at 2017 SCEC Annual Meeting.
- 7668 Lindvall, S. C., Kerwin, S., Evans, J. P., Tyson, J., Chestnut, J., Heron, C., Mass, K., Scharer, K. M., McPhillips, D., Moore, D., Farr, M., Ballard, C., Williams, R. T., Bradbury, K. K., Rowe, C. D., & Savage, H. M. (2017, 08). San Andreas Fault Characterization at the LADWP Elizabeth Tunnel. Poster Presentation at 2017 SCEC Annual Meeting.
- 7669 Lippoldt, R. C., & Sammis, C. G. (2017, 08). A Simple Spring-Mass-Dashpot Model for Slow Earthquakes on a Viscous Fault . Poster Presentation at 2017 SCEC Annual Meeting.
- 7671 Khoshmanesh, M., & Shirzaei, M. (2017, 08). Creep avalanches on San Andreas Fault and their underlying mechanism from 19 years of InSAR and seismicity. Poster Presentation at 2017 SCEC Annual Meeting.
- 7675 Wang, Y., Day, S. M., & Denolle, M. A. (2017, 08). Dynamic Rupture Models of the 2015 Mw7.8 Nepal Earthquake. Poster Presentation at 2017 SCEC Annual Meeting.
- 7674 Feng, T., & Meng, L. (2017, 08). Detecting small offshore earthquakes with Back-Projection Imaging and Match-filter Method. Poster Presentation at 2017 SCEC Annual Meeting.
- 7679 Li, G., & West, J. (2017, 08). Distribution of Earthquake-Triggered Landslides across Landscapes: Towards Understanding Erosional Agency and Cascading Hazards. Poster Presentation at 2017 SCEC Annual Meeting.
- 7681 Tymofyeyeva, E., & Fialko, Y. (2017, 08). Toward the 3-component time-dependent Crustal Motion Model: Integration of Sentinel-1 SAR interferometry and continuous GPS. Poster Presentation at 2017 SCEC Annual Meeting.

- 7683 Li, Y., Bürgmann, R., Yang, H., & Zhou, S. (2017, 08). Dynamic triggering of earthquakes north of Xiaojiang Fault, Yunnan. Poster Presentation at 2017 SCEC Annual Meeting.
- 7684 De Cristofaro, J., & Polet, J. (2017, 08). Towards an Understanding of the Geometry of the Hilton Creek Fault System Within the Long Valley Caldera, Using Ground-Based Magnetics and High-Resolution Topographic Profiles. Poster Presentation at 2017 SCEC Annual Meeting.
- 7689 Rhoades, D. A., Gerstenberger, M. C., Christophersen, A., & Harte, D. S. (2017, 08). Earthquake forecasts and their applications following the M7.8 2016 Kaikoura earthquake. Poster Presentation at 2017 SCEC Annual Meeting.
- 7692 Wang, N., Roten, D., Olsen, K. B., & Pechmann, J. (2017, 08). Rupture Direction, Basin, Distance and Hanging-wall Effects on Ground Motions from M7 Earthquakes on the Salt Lake City Segment of the Wasatch Fault, Utah. Poster Presentation at 2017 SCEC Annual Meeting.
- 7693 Liu, X., Beroza, G. C., & Nakata, N. (2017, 08). Separating non-diffuse component from ambient seismic noise cross-correlation in southern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7696 Murray, K. D., & Lohman, R. B. (2017, 08). 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. Poster Presentation at 2017 SCEC Annual Meeting.
- 7697 Maeda, T., Fujiwara, H., Hayakawa, T., Shimono, S., & Akagi, S. (2017, 08). Cluster analysis of the long-period ground-motion simulation data – application of the Nankai Trough megathrust earthquakes scenarios. Poster Presentation at 2017 SCEC Annual Meeting.
- 7698 Ferrarini, F., Lavecchia, G., de Nardis, R., Arrowsmith, R., Brozzetti, F., & Cirillo, D. (2017, 08). Exploring new seismic hazard scenarios in central Italy: hints about a previously unknown active normal fault highlighted by the Norcia 2016 (Mw 6.5) seismic sequence. Poster Presentation at 2017 SCEC Annual Meeting.
- 7699 Castillo Castellanos, J. A., Kohler, M. D., Massari, A. T., & Clayton, R. W. (2017, 08). Complex Rayleigh Wave Effects on the Seismic Demands of Mid-Rise Buildings. Poster Presentation at 2017 SCEC Annual Meeting.
- 7701 Burgi, P., & Lohman, R. B. (2017, 08). The effect of InSAR time series generation techniques on signals with small spatial scales. Poster Presentation at 2017 SCEC Annual Meeting.
- 7702 Chapman, A. D. (2017, 08). The Pelona–Orocopia–Rand and related schists of southern California: a review of the best-known archive of shallow subduction on the planet. Poster Presentation at 2017 SCEC Annual Meeting.
- 7703 Materna, K., Taira, T., & Bürgmann, R. (2017, 08). Measuring Aseismic Slip through Characteristically Repeating Earthquakes at the Mendocino Triple Junction . Poster Presentation at 2017 SCEC Annual Meeting.
- 7704 Hutchison, A. A., & Ghosh, A. (2017, 08). Ambient tectonic tremor in the San Jacinto Fault. Poster Presentation at 2017 SCEC Annual Meeting.
- 7705 Meier, M., Ampuero, J., & Heaton, T. H. (2017, 08). What does an 'average' large subduction earthquake look like?. Poster Presentation at 2017 SCEC Annual Meeting.
- 7706 Boyd, O. S., Thompson, E. M., Shumway, A., Moschetti, M. P., Stephenson, W. J., & Rezaeian, S. (2017, 08). Basin ZX Maps for use in the USGS National Seismic Hazard Model for the Western United States. Poster Presentation at 2017 SCEC Annual Meeting.
- 7710 Luo, B., & Duan, B. (2017, 08). Dynamics of Non-planar Thrust Faults Governed by Various Friction Laws. Poster Presentation at 2017 SCEC Annual Meeting.
- 7709 Vierra, E. J., Webb, H. N., Dennis, K., Peppard, D. W., Girty, G. H., & Rockwell, T. K. (2017, 08). Recognition of a dismembered positive flower structure along the San Jacinto fault: Stratigraphic and structural implications. Poster Presentation at 2017 SCEC Annual Meeting.

- 7711 Mu, D., Cicotti, P., & Cui, Y. (2017, 08). Manage I/O Task in a Normalized Cross-Correlation Earthquake Detection Code for Large Seismic Datasets. Poster Presentation at 2017 SCEC Annual Meeting.
- 7713 Alvarez, K., & Polet, J. (2017, 08). Measurements of Ground-Based Magnetics and Vertical Deformation From a Leveling Line Across the San Andreas Fault at Durmid Hill. Poster Presentation at 2017 SCEC Annual Meeting.
- 7712 Badt, N. Z., Tullis, T. E., & Hirth, G. (2017, 08). Experimental Study of Thermal Pressurization Weakening and the Role of Fault Roughness. Poster Presentation at 2017 SCEC Annual Meeting.
- 7716 Stein, R. S., Sevilgen, V., Jacobson, D., Kim, A., & Lotto, G. C. (2017, 08). Temblor, an app to transform seismic science into personal risk reduction. Poster Presentation at 2017 SCEC Annual Meeting.
- 7714 Zhan, Z., Yu, C., Hauksson, E., & Cochran, E. S. (2017, 08). Strong SH-to-Love Wave Scattering off the Southern California Continental Borderland. Poster Presentation at 2017 SCEC Annual Meeting.
- 7720 Qiu, H., Ben-Zion, Y., & Lin, F. (2017, 08). Eikonal Tomography of the Southern California Plate Boundary Region. Poster Presentation at 2017 SCEC Annual Meeting.
- 7719 Singleton, D. M., Rockwell, T. K., Murbach, M., Murbach, D., Maloney, J. M., Levy, Y., Marquez, E., & Weidman, L. (2017, 08). Late-Holocene Earthquakes on the Rose Canyon Fault at Old Town, San Diego CA. Poster Presentation at 2017 SCEC Annual Meeting.
- 7722 Kiuchi, R., Mooney, W. D., Mori, J., Zahran, H. M., AlRaddadi, W., & Youssef, S. (2017, 08). Developing ground motion prediction equations for western Saudi Arabia using an adjustment of a reference model. Poster Presentation at 2017 SCEC Annual Meeting.
- 7725 Callaghan, S., Maechling, P. J., Goulet, C. A., Milner, K. R., Graves, R. W., Olsen, K. B., & Jordan, T. H. (2017, 08). CyberShake: bringing physics-based PSHA to central California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7729 Yoshimitsu, N., Ellsworth, W. L., Beroza, G. C., & Schoenball, M. (2017, 08). Two years stress drop estimates for induced earthquakes in Oklahoma. Poster Presentation at 2017 SCEC Annual Meeting.
- 7732 Savran, W. H., Olsen, K. B., & Day, S. M. (2017, 08). Generating 10 Hz deterministic broadband ground motions using kinematic source descriptions. Poster Presentation at 2017 SCEC Annual Meeting.
- 7718 Davis, P. M. (2017, 08). How Much Concentrated Earthquake Damage is due to Site Effects Versus Basin Edge Focusing?. Poster Presentation at 2017 SCEC Annual Meeting.
- 7728 Determan, D. N., Aspiotes, A. G., Guillemot, C., Langbein, J. O., Murray, M., Alvarez, M., & Stark, K. F. (2017, 08). USGS Global Positioning System (GPS) Network in Southern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7735 Nicholson, C., Plesch, A., & Shaw, J. H. (2017, 08). Community Fault Model Version 5.2: Updating & expanding the CFM 3D fault set and its associated fault database. Poster Presentation at 2017 SCEC Annual Meeting.
- 7741 Saunders, J. K., & Haase, J. S. (2017, 08). Improving static slip characterization of near-shore earthquakes with amphibious datasets: A Cascadia example. Poster Presentation at 2017 SCEC Annual Meeting.
- 7740 Chen, Q., & Elbanna, A. E. (2017, 08). The material-geometry nexus: Understanding topographic effects on wave propagation. Poster Presentation at 2017 SCEC Annual Meeting.
- 7724 Axen, G., Soundy, K., & Leuth, V. (2017, 08). Comparison of fault rocks formed paleoseismically and by paleocreep(?): Initial results from the West Salton detachment fault, southern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7739 Lin, Y., & Jordan, T. H. (2017, 08). Attenuation Tomography at High Frequencies in Southern California. Poster Presentation at 2017 SCEC Annual Meeting.

- 7730 Wooddell, K. E., & Abrahamson, N. A. (2017, 08). Methodology for Incorporation of 3-D Simulation Results into Non-Ergodic Ground-Motion Models for Central California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7746 Taborda, R., & Isbiliroglu, Y. D. (2017, 08). Influence of Buildings Spacing in Site-City Interaction Effects. Poster Presentation at 2017 SCEC Annual Meeting.
- 7745 Pierce, I., Wesnousky, S. G., & Owen, L. A. (2017, 08). Terrestrial cosmogenic surface exposure dating of moraines at Lake Tahoe in the Sierra Nevada, California, and slip rate estimate for the West Tahoe fault.. Poster Presentation at 2017 SCEC Annual Meeting.
- 7748 Grant Ludwig, L., Donnellan, A., & Parker, J. W. (2017, 08). Using GeoGateway Line-of-Sight (LOS) Tool to Explore Deformation along the San Andreas Fault in the Carrizo Plain, CA. Poster Presentation at 2017 SCEC Annual Meeting.
- 7749 Yoon, C., Bergen, K., Rong, K., Elezabi, H., Bailis, P., Levis, P., & Beroza, G. C. (2017, 08). Efficient blind search for small similar-waveform earthquakes in a decade of continuous seismic data (2007-2017) in coastal central California . Poster Presentation at 2017 SCEC Annual Meeting.
- 7753 Schoenberg, F. P., & Molyneux, J. (2017, 08). Nonparametric Hawkes models with strike angle covariates. . Poster Presentation at 2017 SCEC Annual Meeting.
- 7752 Pritchard, E. H., Persaud, P., & Stock, J. M. (2017, 08). Using Borehole Breakouts in Deviated Offshore Wells to Constrain Stress Regimes Beneath The Santa Barbara Channel, Offshore Southern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7742 Walker, R. L., Kumar, A., Hammack, R., Dressel, B., Harbert, W., & Aminzadeh, F. (2017, 08). Identifying Long Period Long Duration Events Spatially Associated With Hydraulic Stimulation Operations. Poster Presentation at 2017 SCEC Annual Meeting.
- 7686 Ortega-Arroyo, D., Behr, W. M., & Gentry, E. (2017, 08). The rock record of seismic nucleation: a case study from the Whipple Mountains Detachment Fault, eastern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7747 Harris, R. A. (2017, 08). Large Earthquakes and Creeping Faults. Poster Presentation at 2017 SCEC Annual Meeting.
- 7759 Ahamed, S., & Daub, E. G. (2017, 08). A Machine Learning Approach to Earthquake Rupture Dynamics. Poster Presentation at 2017 SCEC Annual Meeting.
- 7758 Li, B., Ghosh, A., Thurber, C. H., & Lanza, F. (2017, 08). Continuous Tremor in the Alaska-Aleutian Subduction Zone Detected by Aleutian Array of Arrays. Poster Presentation at 2017 SCEC Annual Meeting.
- 7760 Graves, R. W. (2017, 08). Ground-Motion Simulations on Rough Faults in Complex 3D Media. Poster Presentation at 2017 SCEC Annual Meeting.
- 7757 Chaudhuri, K., & Ghosh, A. (2017, 08). Tectonic tremor in San Andreas Fault near Cholame captured by a mini seismic array. Poster Presentation at 2017 SCEC Annual Meeting.
- 7766 Liu, Z., Shen, Z., Liang, C., & Lundgren, P. (2017, 08). Integration of InSAR and GPS data for 3-dimensional crustal deformation mapping. Poster Presentation at 2017 SCEC Annual Meeting.
- 7761 McNeil, J. C., Yule, D., Scharer, K. M., McGill, S. F., McPhillips, D., Castillo, B. A., & Pace, A. (2017, 08). Assessing stratigraphic correlations and fault zone extent at the 18th Ave trench site, Banning strand of the San Andreas Fault, North Palm Springs, California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7771 Angster, S. J., Wesnousky, S. G., Owen, L. A., Figueiredo, P. M., & Hammer, S. (2017, 08). Quaternary Rates of Slip for faults of the Central Walker Lane. Poster Presentation at 2017 SCEC Annual Meeting.

- 7764 Lin, F., Berg, E., Allam, A. A., Qiu, H., Wang, Y., & Ben-Zion, Y. (2017, 08). Shallow crustal imaging in Southern California using ambient noise and fault zone trapped waves. Poster Presentation at 2017 SCEC Annual Meeting.
- 7774 Crempien, J. G., & Archuleta, R. J. (2017, 08). Seismic source and path parameters in Central California estimated with recorded ground motion. Poster Presentation at 2017 SCEC Annual Meeting.
- 7777 Donnellan, A., Parker, J. W., Granat, R. A., Heflin, M. B., Rundle, J. B., Grant Ludwig, L., Pierce, M. E., & Wang, J. (2017, 08). Northwest Propagation of Postseismic Deformation in the Yuha Desert from the 2010 M7.2 El Mayor – Cucapah Earthquake. Poster Presentation at 2017 SCEC Annual Meeting.
- 7775 Kendrick, K. J., & Matti, J. C. (2017, 08). Geomorphic and geologic evidence for slip along the San Bernardino strand of the San Andreas Fault System through the San Gorgonio Pass structural knot, southern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7778 Ye, L., Lapusta, N., & Avouac, J. (2017, 08). Dynamic Stress Changes during the 2015 Gorkha, Nepal Earthquake. Poster Presentation at 2017 SCEC Annual Meeting.
- 7772 Wolfe, F. D., Dolan, J. F., Plesch, A., & Shaw, J. H. (2017, 08). Activity and earthquake potential of the Wilmington blind thrust, Los Angeles, CA: The largest earthquake source not on current southern California hazard maps?. Poster Presentation at 2017 SCEC Annual Meeting.
- 7767 Chamlagain, D., Wesnousky, S. G., Kumahara, Y., Pierce, I., Reedy, T. J., Angster, S. J., & Giri, B. (2017, 08). Large paleoearthquake timing and displacement near Damak in eastern Nepal on the Himalayan Frontal Thrust. Poster Presentation at 2017 SCEC Annual Meeting.
- 7781 Scott, C. P., Arrowsmith, R., Lajoie, L. J., Nissen, E., Maruyama, T., & Tatsuro, C. (2017, 08). The M7 2016 Kumamoto, Japan, Earthquake: 3D coseismic deformation from differential topography. Poster Presentation at 2017 SCEC Annual Meeting.
- 7789 Sudhir, K., & Lapusta, N. (2017, 08). Slip Patterns on Rate-and-State Faults with Heterogeneous Velocity-Weakening and Velocity-Strengthening Friction. Poster Presentation at 2017 SCEC Annual Meeting.
- 7786 Lin, Y., & Lapusta, N. (2017, 08). Comparison of actual and seismologically inferred stress drops in asperity-type dynamic source models of microseismicity. Poster Presentation at 2017 SCEC Annual Meeting.
- 7790 Lambert, V. R., & Lapusta, N. (2017, 08). Implications of depth-dependent variations in fault zone properties for the frequency content of seismic radiation. Poster Presentation at 2017 SCEC Annual Meeting.
- 7782 Best Mckay, M., & Erickson, B. A. (2017, 08). Incorporating anisotropic material properties into simulations of the earthquake cycle . Poster Presentation at 2017 SCEC Annual Meeting.
- 7792 Hernandez, S. (2017, 08). The seismological aftermath of the 2016 Mw7.8 Pedernales, Ecuador earthquake. Poster Presentation at 2017 SCEC Annual Meeting.
- 7795 Kyriakopoulos, C., Oglesby, D. D., Meltzner, A. J., Rockwell, T. K., & Barall, M. (2017, 08). Can the Southern San Andreas Fault be Triggered by Cross-Fault Earthquakes?. Poster Presentation at 2017 SCEC Annual Meeting.
- 7798 Jiang, J., & Fialko, Y. (2017, 08). Earthquake variability, geodetic coupling, and microseismicity on heterogeneous faults: A case study of the Anza seismic gap. Poster Presentation at 2017 SCEC Annual Meeting.
- 7796 Buehler, J., Kilb, D., Vernon, F. L., Wang, W., & Shearer, P. M. (2017, 08). Focal mechanism effects on S/P amplitude ratios in southern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7794 Nie, S., Roten, D., Olsen, K. B., & Day, S. M. (2017, 08). Fourth-Order Staggered-Grid Finite-Difference Seismic Wavefield Estimation Using a Discontinuous Mesh Interface (WEDMI). Poster Presentation at 2017 SCEC Annual Meeting.

- 7803 Reedy, T. J., & Wesnousky, S. G. (2017, 08). Toward characterizing extension and Quaternary faulting on the Pleasant Valley fault, Central Nevada. Poster Presentation at 2017 SCEC Annual Meeting.
- 7800 Meng, L., & Feng, T. (2017, 08). Improving Distance Metrics in Ground Motion Prediction Equations Based with Seismic Array Back-Projections. Poster Presentation at 2017 SCEC Annual Meeting.
- 7801 Weiser, D., Porto, N. B., & Jackson, D. D. (2017, 08). Can maximum magnitude be derived from fault dimensions?. Poster Presentation at 2017 SCEC Annual Meeting.
- 7797 Baltay, A. S., Ellsworth, W. L., Schoenball, M., & Beroza, G. C. (2017, 08). Proposed Community Stress Drop Validation Experiment. Poster Presentation at 2017 SCEC Annual Meeting.
- 7804 Gontz, A. M., Rockwell, T. K., Karlsson, K. W., Fletcher, J. M., & Cambron, J. F. (2017, 08). GPR imagery and identification of neotectonic features of the Chupamieros Fault System, Baja California, Mexico. Poster Presentation at 2017 SCEC Annual Meeting.
- 7808 Abercrombie, R. E., Ruhl, C. J., & Smith, K. D. (2017, 08). Detailed observations of seismicity, stress drop and directivity on a complex fault structure in Mogul Nevada. Poster Presentation at 2017 SCEC Annual Meeting.
- 7783 Peshette, P. L., Lozos, J. C., & Yule, D. (2017, 08). Dynamic rupture modeling of thrust faults with parallel surface traces.. Poster Presentation at 2017 SCEC Annual Meeting.
- 7809 Cui, Y., Mu, D., & Roten, D. (2017, 08). SEISM-IO: A High Level Parallel I/O Library for High-Performance Seismic Applications. Poster Presentation at 2017 SCEC Annual Meeting.
- 7690 Hu, Z., & Olsen, K. B. (2017, 08). Testing the Density of Seismic Networks with ShakeMap. Poster Presentation at 2017 SCEC Annual Meeting.
- 7811 Keen-Zebert, A. (2017, 08). Luminescence dating for paleoseismic research: What users need to know. Poster Presentation at 2017 SCEC Annual Meeting.
- 7770 Smith-Konter, B. R., Sandwell, D. T., Tong, X., Xu, X., Ward, L., & Higa, J. (2017, 08). Deformation of the southern San Andreas Fault System induced by lateral variations in crustal rigidity. Poster Presentation at 2017 SCEC Annual Meeting.
- 7816 Lozos, J. C. (2017, 08). Rupture propagation through the Big Bend of the San Andreas Fault: a dynamic modeling case study of the Great Earthquake of 1857. Poster Presentation at 2017 SCEC Annual Meeting.
- 7813 Lenz, D., Tobin, J., Breuer, A. N., Heinecke, A., Yount, C., & Cui, Y. (2017, 08). Tuning AWP-ODC-OS for efficient, scalable performance on manycore architectures. Poster Presentation at 2017 SCEC Annual Meeting.
- 7817 Elbanna, A. E., Ma, X., & Hajarovalsvadi, S. (2017, 08). Towards dynamic rupture models with high resolution fault zone physics. Poster Presentation at 2017 SCEC Annual Meeting.
- 7819 Barbery, M. R., Saber, O., Chester, F. M., & Chester, J. S. (2017, 08). Examination of multi-scale flash-heating at seismic slip rates in granite. Poster Presentation at 2017 SCEC Annual Meeting.
- 7823 Bahadori, A., Kim, J., Kraner, M. L., & Holt, W. E. (2017, 08). Ten Years of Seasonally Modulated Strain History in Southern California Inferred from cGPS Data. Poster Presentation at 2017 SCEC Annual Meeting.
- 7824 Adusumilli, S., Borsa, A. A., Silverii, F., & Agnew, D. C. (2017, 08). Learn to be still: Accounting for the hydrologic contributions to GPS displacements in the continental United States. Poster Presentation at 2017 SCEC Annual Meeting.
- 7649 Fletcher, J. M., Cambron, J. F., Rockwell, T. K., Karlsson, K. W., Figueiredo, P. M., Spelz, R. M., Lachan, P. G., Peña Villa, I., Leon Loya, A., Hinojosa, A., Prasanajit Naik, S., & Owen, L. A. (2017, 08). Do low-angle normal faults produce large earthquakes? A case study of the Cañada David Detachment of northern Baja California, Mexico. Poster Presentation at 2017 SCEC Annual Meeting.

- 7734 Lin, T., Bijelic, N., & Deierlein, G. (2017, 08). Characterization of basin effects for seismic performance assessments of tall buildings using CyberShake simulations. Poster Presentation at 2017 SCEC Annual Meeting.
- 7707 Dahlquist, M. P., West, J., & Martinez, J. (2017, 08). Co- and post-seismic debris flows triggered by the 2015 Gorkha Earthquake. Poster Presentation at 2017 SCEC Annual Meeting.
- 7818 Cattania, C., Segall, P., & Hainzl, S. (2017, 08). Slip partitioning and scaling relations of repeating earthquakes on rate-state faults. Poster Presentation at 2017 SCEC Annual Meeting.
- 7820 Ramirez-Guzman, L., Jaimes, M. A., & Mendoza, C. (2017, 08). Sensitivity and Comparison of Two Broad-band Synthetic Generation Methods. Poster Presentation at 2017 SCEC Annual Meeting.
- 7780 Ma, X., & Elbanna, A. E. (2017, 08). Stick Slip Instabilities and Strain Localization Dynamics in a fluid-infiltrated fault gouge zone model . Poster Presentation at 2017 SCEC Annual Meeting.
- 7830 Zaliapin, I., & Ben-Zion, Y. (2017, 08). Quantifying the coalescence process of microcracks leading to a system-size failure. Poster Presentation at 2017 SCEC Annual Meeting.
- 7828 Castillo, B. A., McGill, S. F., Scharer, K. M., Yule, D., McPhillips, D., McNeil, J. C., & Pace, A. (2017, 08). Preliminary ages of prehistoric earthquakes on the Banning Strand of the San Andreas Fault, near North Palm Springs, California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7791 Erickson, B. A., & Kozdon, J. E. (2017, 08). Earthquake Cycles With Complex Fault Geometries. Poster Presentation at 2017 SCEC Annual Meeting.
- 7827 Walton, M. L., Brothers, D. S., Conrad, J. E., Maier, K. L., Roland, E. C., & Kluesner, J. W. (2017, 08). Fault and depositional architecture of the Catalina Basin, southern California Inner Continental Borderland: implications for hazards and basin evolution. Poster Presentation at 2017 SCEC Annual Meeting.
- 7835 Milner, K. R., Shaw, B. E., Gilchrist, J. J., & Jordan, T. H. (2017, 08). Are Physics-Based Simulators Ready for Prime Time? Comparisons of RSQSim with UCERF3 and Observations. Poster Presentation at 2017 SCEC Annual Meeting.
- 7836 van der Elst, N. J., & Page, M. T. (2017, 08). Model-free aftershock forecasts constructed from similar sequences in the past. Poster Presentation at 2017 SCEC Annual Meeting.
- 7837 Shakibay Senobari, N., & Funning, G. J. (2017, 08). Repeating earthquakes detected by a new fast method reveal complex creep behavior in the northern San Francisco Bay Area. Poster Presentation at 2017 SCEC Annual Meeting.
- 7834 Jänecke, S. U., Belgarde, B. E., Bykerk-Kauffman, A., Evans, J. P., Kirby, S., Markowski, D., Steely, A., & Thornock, S. J. (2017, 08). Ladders, stair-steps, and crossing faults: Insights from southern California's active strike-slip faults. Poster Presentation at 2017 SCEC Annual Meeting.
- 7842 Song, X., Jordan, T. H., & Okaya, D. A. (2017, 08). Stochastic Representations of Seismic Anisotropy: Verification of Effective Media Models for Locally Isotropic 3D Heterogeneity. Poster Presentation at 2017 SCEC Annual Meeting.
- 7843 McPhillips, D., & Scharer, K. M. (2017, 08). Sources and Magnitudes of Uncertainty in Fault Slip Rate, Cucamonga Thrust Fault, Southern California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7845 Shaw, K. A., & Kent, G. M. (2017, 08). Garlock Fault: Re-assessing past stream offsets at Oak Creek Canyon and predicting future fault displacements. Poster Presentation at 2017 SCEC Annual Meeting.
- 7839 Dorsey, M. T., Rockwell, T. K., Girty, G. H., Ostermeijer, G., Mitchell, T. M., & Fletcher, J. M. (2017, 08). Evidence of Na- and Mg-rich Hydrothermal Brines Driving Chloritization and Albitization in an Active Fault Zone: Case Study of the Borrego Fault, Baja CA, Mexico. Poster Presentation at 2017 SCEC Annual Meeting.

- 7848 Mueller, K. J., & Anthony, R. (2017, 08). Revised (lower) slip rate for the Northern Death Valley Fault based on a new method for restoring alluvial fan cutoff lines. Poster Presentation at 2017 SCEC Annual Meeting.
- 7847 Maechling, P. J., Taborda, R., Olsen, K. B., Callaghan, S., Jordan, T. H., & Goulet, C. A. (2017, 08). Current Capabilities of the SCEC Unified Community Velocity Model (UCVM) Software Framework. Poster Presentation at 2017 SCEC Annual Meeting.
- 7853 Adams, M. N., & Ji, C. (2017, 08). Preliminary insights into the fault geometry and rupture history of the 2016 Mw 7.8 Kaikoura, New Zealand, earthquake. Poster Presentation at 2017 SCEC Annual Meeting.
- 7849 Waco, J., Blisniuk, K. D., & Fosdick, J. C. (2017, 08). Evidence for an active and evolving left-stepping San Andreas fault (Mission Creek fault strand) from the Little San Bernardino Mountains to Yucaipa Ridge. Poster Presentation at 2017 SCEC Annual Meeting.
- 7738 Wade, A., Arrowsmith, R., Donnellan, A., Vernon, F. L., & Ben-Zion, Y. (2017, 08). Dekameter-scale geologic structure validation of shallow seismic properties along the San Jacinto fault at Sage Brush Flat, Anza, California. Poster Presentation at 2017 SCEC Annual Meeting.
- 7852 Hatch, R. L., Smith, K. D., & Abercrombie, R. E. (2017, 08). Analysis of Two Magnitude ~4 Earthquakes and Aftershocks Near Truckee, California, 2017. Poster Presentation at 2017 SCEC Annual Meeting.
- 7856 Yao, D., Peng, Z., Daniels, C., & Meng, X. (2017, 08). Systematic Search for Repeating Earthquakes along the Central San Jacinto Fault. Poster Presentation at 2017 SCEC Annual Meeting.
- 7855 Schaal, N., Lapusta, N., & Lin, Y. (2017, 08). Exploring seismological properties of asperity-type events in a rate-and-state fault model. Poster Presentation at 2017 SCEC Annual Meeting.
- 7832 Zhong, K., Yan, W., Lin, T., & Deierlein, G. (2017, 08). Demonstration of the efficacy of the BBP ground motions for nonlinear structural analysis and collapse assessment. Poster Presentation at 2017 SCEC Annual Meeting.
- 7854 Funning, G. J., & Garcia, A. (2017, 08). A Systematic Study of Earthquake Detectability Using Sentinel-1 TOPS InSAR. Poster Presentation at 2017 SCEC Annual Meeting.
- 7857 Thatcher, W. R., Chapman, D. S., Allam, A. A., & Williams, C. (2017, 08). Refining Southern California Geotherms Using Seismologic, Geologic, and Petrologic Constraints. Poster Presentation at 2017 SCEC Annual Meeting.
- 7844 Nyst, M., Fitzenz, D. D., & Shome, N. (2017, 08). How NSHMP 2014 and UCERF3 have changed the earthquake risk landscape in the US. Poster Presentation at 2017 SCEC Annual Meeting.
- 7860 Williams, A. M., Arrowsmith, R., Rockwell, T. K., Grant Ludwig, L., Akciz, S. O., & Gontz, A. M. (2017, 08). Testing the shorter and variable recurrence interval hypothesis along the Cholame segment of the San Andreas Fault. Poster Presentation at 2017 SCEC Annual Meeting.
- 7865 Lozos, J. C., Nicholson, C., & Onderdonk, N. W. (2017, 08). Introducing the Cajon Pass Earthquake Gate Area. Oral Presentation at 2017 SCEC Annual Meeting.
- 7866 Allison, K. L., & Dunham, E. M. (2017, 08). Thermomechanical earthquake cycle simulations with rate-and-state friction and nonlinear viscoelasticity. Poster Presentation at 2017 SCEC Annual Meeting.
- 7861 Seitz, G. G., Mareschal, M., Barrett, N., & Olsen, D. (2017, 08). Timing of Earthquakes during the past 800 years along the Peninsula Section of the San Andreas Fault Suggests Persistent 1906-like Behavior. Poster Presentation at 2017 SCEC Annual Meeting.
- 7867 Holmes, J. J., Driscoll, N. W., & Kent, G. M. (2017, 08). 3D Constraints On Fault Architecture and Strain Distribution of the Newport-Inglewood Rose Canyon and San Onofre Trend Fault Systems. Poster Presentation at 2017 SCEC Annual Meeting.
- 7868 Terry, R. L., Funning, G. J., & Floyd, M. (2017, 08). A study of the December 2016, The Geysers, CA earthquake using InSAR and GPS. Poster Presentation at 2017 SCEC Annual Meeting.

- 7806 Lai, V., Graves, R. W., & Helmberger, D. V. (2017, 08). Impact of Earthquake Depth on Basin Response. Poster Presentation at 2017 SCEC Annual Meeting.
- 7863 Michel, S. G., Avouac, J., Lapusta, N., & Jiang, J. (2017, 08). Pulse-Like Partial Ruptures and High-Frequency Radiation at Creeping-Locked Transition during Megathrust Earthquakes. Poster Presentation at 2017 SCEC Annual Meeting.
- 7859 Inserra, N. J., Nelems, C., Muthala, R., Torres, J., & Akciz, S. O. (2017, 08). Paleoseismic Investigation of Van Matre Ranch Site Along the Carrizo Plain Section of the San Andreas Fault. Poster Presentation at 2017 SCEC Annual Meeting.
- 7871 Peng, Z., Li, C., Li, Z., Zhang, C., & Nakata, N. (2017, 08). Detecting Micro-seismicity and Long-duration Tremor-like Events from the Oklahoma Wavefield Experiment. Poster Presentation at 2017 SCEC Annual Meeting.
- 7858 Prush, V. B., & Oskin, M. E. (2017, 08). Effects of Improved Production Rates and Statistical Treatment of Cosmogenic Dates on California fault slip rates . Poster Presentation at 2017 SCEC Annual Meeting.
- 7874 Zeng, Y., Petersen, M. D., & Shen, Z. (2017, 08). Earthquake Potential in California-Nevada Implied by Correlation of Strain Rate and Seismicity . Poster Presentation at 2017 SCEC Annual Meeting.
- 7862 Mendoza, M. M., Ghosh, A., Karplus, M. S., Nabelek, J., Sapkota, S. S., Adhikari, L. B., Klemperer, S. L., & Velasco, A. A. (2017, 08). Reconciling Fault Geometry in Nepal Himalaya using the "NAMASTE" Seismic Network. Poster Presentation at 2017 SCEC Annual Meeting.
- 7784 Young, Z. M., & Kreemer, C. W. (2017, 08). The Far-Field Effect of Large Earthquakes in GPS Time-Series. Poster Presentation at 2017 SCEC Annual Meeting.
- 7637 Larochelle, S., Lapusta, N., & Ampuero, J. (2017, 08). The Role of Dilatancy in Fluid-Induced Fault Slip . Poster Presentation at 2017 SCEC Annual Meeting.
- 7878 McGill, S. F., Figueiredo, P. M., & Owen, L. A. (2017, 08). Puzzling results in a slip rate study for the Banning Strand of the San Andreas Fault near North Palm Springs. Poster Presentation at 2017 SCEC Annual Meeting.
- 7880 Pearson, J. K., & Barth, N. C. (2017, 08). Using lidar to elucidate the slip behavior of the southern Alpine Fault, New Zealand. Poster Presentation at 2017 SCEC Annual Meeting.
- 7850 Sana, H. (2017, 08). Synthetic ground motions of the 8 October 2005 Kashmir earthquake (Mw 7.6): a stochastic finite fault element approach. Poster Presentation at 2017 SCEC Annual Meeting.
- 7883 Asimaki, D., Shi, J., & Taborda, R. (2017, 08). A velocity model for basin sediments in Southern California based on field measurements. Poster Presentation at 2017 SCEC Annual Meeting.
- 7887 Zhang, Y., Wu, Z., Zhang, X., & Li, G. (2017, 08). Annual Earthquake Potential Consultation: A Real Forward Prediction Test in China. Poster Presentation at 2017 SCEC Annual Meeting.
- 7888 Mazzoni, S. (2017, 08). Post-Earthquake Reconnaissance: a Structural Engineer's Perspective. Oral Presentation at 2017 SCEC Annual Meeting.
- 7889 Zinke, R., Hollingsworth, J., Dolan, J. F., & Van Dissen, R. J. (2017, 08). Quantifying 3D deformation in the 14 November MW 7.8 Kaikoura, New Zealand earthquake using a novel technique for correlation of optical satellite imagery. Poster Presentation at 2017 SCEC Annual Meeting.
- 7890 Gu, C., Prieto, G. A., Mok, U., Marzouk, Y. M., Evans, B., & Toksöz, N. (2017, 08). Bayesian source mechanism inversion of induced seismicity in oil/gas fields and pico-seismicity (acoustic emission) in the laboratory. Poster Presentation at 2017 SCEC Annual Meeting.
- 7891 Keranen, K. M., Savage, H. M., Coffey, G. L., Lohman, R. B., Lambert, C., Stevens, N., & Rabinowitz, H. S. (2017, 08). Rupture of an Immature Fault in the Pawnee Mw5.8 earthquake. Poster Presentation at 2017 SCEC Annual Meeting.

- 7892 Williams, E. F., Castillo, C. M., Klemperer, S. L., Raineault, N., & Gee, L. S. (2017, 08). A new estimate of latest Quaternary slip on the offshore Anacapa-Dume Fault at Sycamore Knoll, Southern California Continental Borderland. Poster Presentation at 2017 SCEC Annual Meeting.
- 7893 Barba, M., Tiampo, K. F., & Glasscoe, M. T. (2017, 08). Linking seismicity and fault surface properties. Poster Presentation at 2017 SCEC Annual Meeting.
- 7902 Isbilibroglu, Y. D., & Taborda, R. (2017). A preliminary study about the influence of building clusters on the variability of the ground motion during earthquakes. Poster Presentation at QuakeCoRE Annual Meeting.
- 7963 Baker, J. W., & Chen, Y. (2018). Spatial correlations in CyberShake physics-based ground motion simulationS. Oral Presentation at Eleventh U.S. National Conference on Earthquake Engineering.
- 7981 Bormann, J. M., Kent, G. M., Driscoll, N. W., & Harding, A. J. (2015, 08). Strike slip tectonics in the Inner California Borderlands, Lasuen Knoll, and the southern termination of the Palos Verdes fault. Poster Presentation at 2015 SCEC Annual Meeting.
- 7984 Bormann, J. M., Kent, G. M., Driscoll, N. W., Harding, A. J., Holmes, J. J., Sahakian, V. J., & Wesnousky, S. G. (2014, 08). Neotectonics of the San Diego Trough and Coronado Bank fault systems, Inner California Borderlands. Poster Presentation at 2014 SCEC Annual Meeting.
- 7989 Maechling, P. J., Gill, D., Taborda, R., Shaw, J. H., Plesch, A., Olsen, K. B., Callaghan, S., Jordan, T. H., & Goulet, C. A. (2018, 06). The SCEC UCVM Software Framework for Distributing and Querying Seismic Velocity Models. Poster Presentation at 11th National Conference in Earthquake Engineering.
- 7990 Taborda, R., Olsen, K. B., Graves, R. W., Silva, F., Khoshnevis, N., Savran, W. H., Roten, D., Shi, Z., Goulet, C. A., Bielak, J., Maechling, P. J., Cui, Y., & Jordan, T. H. (2018, 06). High-frequency simulations: Verification and validation of the M5.1 La Habra, CA, earthquake. Oral Presentation at 11th National Conference in Earthquake Engineering.
- 7993 Taborda, R., & Isbilibroglu, Y. D. (2018, 06). Characterization of ground motion variability due to the presence of the built environment. Poster Presentation at 11th National Conference in Earthquake Engineering.
- 7994 Jordan, T. H., & Others, C. (2017, 11). CyberShake models of seismic hazards in Southern and Central California. Presentation at 11th National Conference in Earthquake Engineering.
- 7997 Bijelic, N., Lin, T., & Deierlein, G. (2018, 6). Utilization of physics-based ground motion simulations for tall building risk assessment. Oral Presentation at 16th European Conference on Earthquake Engineering.
- 7998 Bijelic, N., Lin, T., & Deierlein, G. (2018, 6). Contrasting CyberShake simulations and conventional hazard analysis to assess collapse risk of tall buildings in the Los Angeles basin. Oral Presentation at 11th National Conference on Earthquake Engineering.
- 8023 Legg, M. R., Sorlien, C. C., Nicholson, C., Kamerling, M. J., & Kuhn, G. (2018, 03). Potential for large complex multi-fault earthquakes offshore southern California. Oral Presentation at 11th U.S. National Conference on Earthquake Engineering.
- 8024 Crouse, C., Jordan, T. H., Milner, K. R., Goulet, C. A., Callaghan, S., & Graves, R. W. (2018, 06). Site-Specific MCEER Response Spectra for Los Angeles Region based on 3-D Numerical Simulations and the NGA West2 Equations. Oral Presentation at 11th National Conference in Earthquake Engineering. Paper #518.
- 8089 Huang, Y. (2017, 12). The effect of segmented fault zones on earthquake rupture propagation and termination. Oral Presentation at 2017 AGU Fall Meeting.
- 8090 Huang, Y., & Lozos, J. C. (2018, 05). Earthquake rupture propagation and termination in fault zones with along-strike variation of damage. Oral Presentation at 2018 Seismology of the Americas Meeting.

- 8091 Huang, Y. (2018, 06). The interaction of earthquake characteristics and fault mechanics at various scales from observation-driven simulations. Oral Presentation at 2018 IRIS Workshop.
- 8092 Thurber, C. H., Nayak, A., Fang, H., Zeng, X., & Zhang, H. (2018, 05). Tomographic Imaging of the Central California Crust with Multiple Methods. Oral Presentation at 2018 Seismology of the Americas Meeting.
- 8102 Gheibi, A., & Hedayat, A. (2018, 06). The Relation between Static Young's Modulus and Dynamic Bulk Modulus of Granular Materials and the Role of Stress History. Oral Presentation at 5th Geotechnical and Earthquake Engineering and Soil Dynamics Conference.
- 8103 Gheibi, A., & Hedayat, A. (2018, 06). Ultrasonic Investigation of Friction Processes in Granular Gouge Materials. Oral Presentation at 52nd US Rock Mechanics / Geomechanics Symposium.
- 8123 Legg, M. R., Sorlien, C. C., Nicholson, C., Kamerling, M. J., & Kuhn, G. G. (2018, 06). Potential for large complex multi-fault earthquakes offshore southern California. Poster Presentation at 11th National Conference on Earthquake Engineering.
- 8124 Kyriakopoulos, C., Oglesby, D. D., Rockwell, T. K., & Meltzner, A. J. (2017). Multi-Fault Rupture Scenarios in the Brawley Seismic Zone . Oral Presentation at AGU2017.
- 8152 Petal, M. A. (2018, 07). Causes of deaths and injuries in the 2015 Gorkha (Nepal) earthquake . Poster Presentation at 2018 SCEC Annual Meeting.
- 8160 Bohnhoff, M., Malin, P. E., Nurlu, M., & Bluemle, F. (2018, 07). Emergent failure process of a M4.2 earthquake offshore Istanbul observed from GONAF downhole recordings. Poster Presentation at 2018 SCEC Annual Meeting.
- 8173 Brocher, T. M. (2018, 07). Are we still seeing aftershocks from the M6.8 1872 Central Washington Earthquake?. Poster Presentation at 2018 SCEC Annual Meeting.
- 8186 Sleep, N. H. (2018, 07). Searching for Spot-Fire Earthquakes Triggered During the 2004 Parkfield Mainshock. Poster Presentation at 2018 SCEC Annual Meeting.
- 8193 Shinevar, W., Behn, M., Hirth, G., & Jagoutz, O. (2018, 07). Inferring crustal viscosity from seismic velocity: Application to the lower crust of Southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8196 Castillo Castellanos, J. A., & Clayton, R. W. (2018, 07). First-arrival travelttime tomography at Long Beach California using ambient seismic noise and the adjoint-state method. Poster Presentation at 2018 SCEC Annual Meeting.
- 8199 Hough, S. E., & Graves, R. W. (2018, 07). The 1933 Long Beach, California, Earthquake. Poster Presentation at 2018 SCEC Annual Meeting.
- 8200 Celebi, M., Sahakian, V. J., Melgar, D., & Quintanar, L. (2018, 07). Zoning Verification in Mexico City using strong motions of the M7.1 M7.1 Puebla-Morelos earthquake of September 19, 2017. Poster Presentation at 2018 SCEC Annual Meeting.
- 8201 Skoumal, R., & Kaven, J. (2018, 07). Characterizing seismogenic fault structures in Oklahoma. Poster Presentation at 2018 SCEC Annual Meeting.
- 8205 Barnhart, W. D., Shea, H., Peterson, K., Gold, R. D., Briggs, R., & Harbor, D. J. (2018, 07). Co-seismic Vertical Offset Retrieval From High-Resolution, Stereogrammetric DEMs: Examples from the 2013 Baluchistan, Pakistan Earthquake. Poster Presentation at 2018 SCEC Annual Meeting.
- 8210 Jia, Z., Clayton, R. W., & Castillo Castellanos, J. A. (2018, 07). Shallow Velocity Structure of Los Angeles Basin from ambient noise correlations with dense seismic arrays. Poster Presentation at 2018 SCEC Annual Meeting.
- 8213 Wolfe, F. D., Shaw, J. H., Plesch, A., Ponti, D. J., Dolan, J. F., & Legg, M. R. (2018, 07). The Wilmington Blind-Thrust Fault: An active, concealed earthquake source beneath Los Angeles, CA. Poster Presentation at 2018 SCEC Annual Meeting.

- 8214 Erickson, B. A., Jiang, J., Barall, M., Lapusta, N., Dunham, E. M., Harris, R. A., Abrahams, L., Allison, K. L., Ampuero, J., Barbot, S. D., Cattania, C., Elbanna, A. E., Fialko, Y., Idini Zabala, B., Kozdon, J. E., Lambert, V. R., Liu, Y., Luo, Y., Ma, X., Segall, P., Shi, P., & Wei, M. (2018, 07). The Community Code Verification Exercise for Simulating Sequences of Earthquakes and Aseismic Slip (SEAS): Initial Benchmarks and Future Directions. Poster Presentation at 2018 SCEC Annual Meeting.
- 8215 Li, Y. (2018, 07). Fault Continuity and Rupture Branching of the 2014 Mw 6.0 South Napa Earthquake Viewed by Fault-Zone Trapped Waves. Poster Presentation at 2018 SCEC Annual Meeting.
- 8226 Llenos, A. L., Michael, A. J., Page, M. T., van der Elst, N. J., & McBride, S. K. (2018, 07). The earthquake rates they are a-changin': Improving forecasts during earthquake swarms. Poster Presentation at 2018 SCEC Annual Meeting.
- 8232 Xu, X., Ward, L., Jiang, J., Smith-Konter, B. R., Tymofeyeva, E., Lindsey, E. O., Sylvester, A. G., & Sandwell, D. T. (2018, 07). Surface Creep Rate of the Southern San Andreas Fault Modulated by Stress Perturbations from Nearby Large Events. Poster Presentation at 2018 SCEC Annual Meeting.
- 8235 Li, Z., Hauksson, E., Heaton, T. H., Rivera, L., & Andrews, J. R. (2018, 07). Checking Data Quality of Co-located Broadband and Strong-motion Sensors in Southern California Seismic Network. Poster Presentation at 2018 SCEC Annual Meeting.
- 8237 Gilchrist, J. J., Jordan, T. H., & Milner, K. R. (2018, 07). Probabilities of Earthquakes in the San Andreas Fault System: Estimations from RSQSim Simulations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8241 Liu, J., Yuan, Z., Wang, W., Weldon, R. J., Oskin, M. E., & Shao, Y. (2018, 08). A 6000-Year-Long Paleoseismologic Record of Earthquakes along the Xorkoli Section of the Altyn Tagh Fault, China. Poster Presentation at 2018 SCEC Annual Meeting.
- 8245 Carlson, G., Shirzaei, M., Ojha, C., & Werth, S. (2018, 08). Seasonal and long-term crustal stress modulation due to aquifer compaction and groundwater unloading during the 2007-2010 drought in California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8248 Cortez, J., Beas, G., Wang, S., Tong, C., Rossouw, S. D., & Ascencio, K. (2018, 08). Predictive Skill: Using the Bayesian Inference to Study RSQSim and UCERF3. Poster Presentation at 2018 SCEC Annual Meeting.
- 8247 Trotter, A., Mei, R., Given, P. R., Polcino, C., Carrillo, E., Wolz, J., Verna, R., Pearson, J. K., Noriega, G. R., & Jordan, T. H. (2018, 08). Visualization of Hazards Associated with Simulated Earthquakes in Southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8249 Ho, B. T., Weerasooriya, S. R., Narvaez-Colon, A. G., Streitenberger, T., Zhu, D., Jones, T. L., Addo, B., Yu, J., Milner, K. R., Noriega, G. R., Pearson, J. K., & Jordan, T. H. (2018, 08). The Development of 3-D Software to Assist the Visualization of Large and Concurrent Earthquake Data. Poster Presentation at 2018 SCEC Annual Meeting.
- 8250 Kababjyan, V., Panchigar, S. P., Lopez, A. G., Mizutani, T., Guerra, A. A., Callaghan, S., Gilchrist, J. J., Pearson, J. K., Noriega, G. R., & Jordan, T. H. (2018, 08). Simulating Millions of Years of Earthquakes in California using HPC. Poster Presentation at 2018 SCEC Annual Meeting.
- 8246 Heimisson, E. R., Dunham, E. M., & Almquist, M. (2018, 08). Nucleation and propagation of slow slip pulses on rate-strengthening faults. Poster Presentation at 2018 SCEC Annual Meeting.
- 8251 DeVries, P., Thompson, T. B., Wattenberg, M., Viegas, F., & Meade, B. J. (2018, 08). Deep learning for aftershock location patterns and the earthquake cycle. Oral Presentation at 2018 SCEC Annual Meeting.
- 8254 Reed, M. P., Burgette, R. J., Scharer, K. M., Lifton, N., & McPhillips, D. (2018, 08). Geomorphic and structural mapping in pursuit of a slip rate for the Santa Susana Fault, Southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8265 De Pascale, G. P., Froude, M., Penna, I., Hermanns, R., Moncada, D., Sepulveda, S., Persico, M., Petley, D., Vargas, G., Murphy, W., & Pairoa, S. (2018, 08). Preliminary geologic slip rates along

Andes fastest slipping crustal fault, the Liquiñe-Ofqui Fault Zone (LOFZ), Patagonia, Chile . Poster Presentation at 2018 SCEC Annual Meeting.

8277 Hua, W., Ke, N., & DAI, Y. (2018, 08). Comprehensive Study on Reservoir-induced Seismicity in the Xiaowan Reservoir, Yunnan Province, China. Poster Presentation at 2018 SCEC Annual Meeting.

8279 Aso, M., Aso, N., & Ide, S. (2018, 08). Focal mechanisms and seismicity of LFEs on Parkfield. Poster Presentation at 2018 SCEC Annual Meeting.

8284 Denolle, M. A., & Danré, P. J. (2018, 08). Earthquake behaviors in Source Time functions: energetic onset of earthquakes and biases from over-simplifying the source pulse. Poster Presentation at 2018 SCEC Annual Meeting.

8286 Langenheim, V. E., & Matti, J. C. (2018, 08). Gravity and aeromagnetic maps of the San Geronio Pass region, California: Potential insights from potential-field data on fault and basin geometry in a restraining bend. Poster Presentation at 2018 SCEC Annual Meeting.

8287 Ross, Z. E., Hauksson, E., Trugman, D. T., & Shearer, P. M. (2018, 08). Detecting millions of earthquakes in southern California with template matching. Oral Presentation at 2018 SCEC Annual Meeting.

8289 Hollis, D. D., & Clayton, R. W. (2018, 08). A Proposal for an Industry-Scale Seismic Survey in the Los Angeles Basin. Poster Presentation at 2018 SCEC Annual Meeting.

8291 McGregor, I., & Onderdonk, N. W. (2018, 08). Late Quaternary Deformation in the Inverted Santa Maria Basin, CA: Documenting and Quantifying Active Folding from Syn-Tectonic Deposits. Poster Presentation at 2018 SCEC Annual Meeting.

8292 Wang, N., Takedatsu, R., Olsen, K. B., & Day, S. M. (2018, 08). Implementing Inter-Frequency Correlations into the SDSU Broadband Ground Motion Method. Poster Presentation at 2018 SCEC Annual Meeting.

8295 Aslam, K., & Daub, E. G. (2018, 08). Modeling damage evolution in the near-fault region as a result of rupture on complex fault . Poster Presentation at 2018 SCEC Annual Meeting.

8304 Renou, J., & Vallée, M. (2018, 08). Fast moment acceleration in the development phase of an earthquake derived from a large catalog of Source Time Functions. Poster Presentation at 2018 SCEC Annual Meeting.

8305 Meng, G., Su, X., Hong, S., Zhou, X., Dong, Y., & Li, C. (2018, 08). Pre-seismic and co-seismic deformation of the 2017 Mw 6.5 Jiuzhaigou, eastern Tibet earthquake constrained by GPS and InSAR data. Poster Presentation at 2018 SCEC Annual Meeting.

8296 Danré, P. J., Yin, J., Lipovsky, B. P., & Denolle, M. A. (2018, 08). Earthquake sub-event scaling: new perspective for rupture determinism. Poster Presentation at 2018 SCEC Annual Meeting.

8308 Lambert, V. R., Perry, S. M., & Lapusta, N. (2018, 08). Earthquake Sequences in Rate-and-State Fault Models with Thermal Pressurization. Poster Presentation at 2018 SCEC Annual Meeting.

8309 White, M. C., Ben-Zion, Y., & Vernon, F. L. (2018, 08). Detailed seismic catalog for the San Jacinto fault zone region (2008-2016) from automated processing of raw waveform data. Poster Presentation at 2018 SCEC Annual Meeting.

8310 Juarez, A., & Jordan, T. H. (2018, 08). Optimization of Data Functionals for Full-3D Tomography. Poster Presentation at 2018 SCEC Annual Meeting.

8311 Larochelle, S., Lapusta, N., Ampuero, J., & Cappa, F. (2018, 08). Numerical Modeling of a Fluid-Induced Aseismic-Seismic Slip Sequence on a Rate-and-State Fault. Poster Presentation at 2018 SCEC Annual Meeting.

8312 Chartier, T., Scotti, O., & Lyon-Caen, H. (2018, 08). Constraining epistemic uncertainties on hazard models in the Marmara region using SHERIFS (Seismic Hazard and Earthquake Rates in Fault Systems). Poster Presentation at 2018 SCEC Annual Meeting.

- 8313 Blanton, C. M., Rockwell, T. K., Gontz, A., & Kelly, J. (2018, 08). Analysis of Offset Stream Channels – Deconstructing Creep and Coseismic Slip Components Using Very High Resolution SfM Imagery, Southern San Andreas Fault, Coachella Valley, California . Poster Presentation at 2018 SCEC Annual Meeting.
- 8314 Rollins, C., & Avouac, J. (2018, 08). A long-term-average estimate of earthquake likelihoods and the largest earthquake in central Los Angeles. Poster Presentation at 2018 SCEC Annual Meeting.
- 8318 Thatcher, W. R., & Chapman, D. S. (2018, 08). Heat Flow Data and Seismic Imaging Reveal Both Transient and Steady-State Thermo-Mechanical Processes at Work Beneath Southern California. Oral Presentation at 2018 SCEC Annual Meeting.
- 8320 Yong, A., McPhillips, D., Herrick, J., & Dozal, J. (2018, 08). An Updated Compilation of VS30 in the United States. Poster Presentation at 2018 SCEC Annual Meeting.
- 8323 Shelly, D. R., & Hardebeck, J. L. (2018, 08). Illuminating faulting complexity of the 2017 Yellowstone (Maple Creek) earthquake swarm. Poster Presentation at 2018 SCEC Annual Meeting.
- 8321 Douilly, R., Oglesby, D. D., Cooke, M. L., & Beyer, J. L. (2018, 08). Effects of Fault Geometry and Pre-Stress Loading for Scenarios of Earthquakes on the Eastern San Gorgonio Pass Region in CA using Dynamic Rupture Simulations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8322 Harris, R. A. (2018, 08). Moving Earthquake Science Forward - Earthquake Simulation Codes and the SCEC-USGS Dynamic Rupture Group. Oral Presentation at 2018 SCEC Annual Meeting.
- 8324 Qiu, H., Ben-Zion, Y., & Lin, F. (2018, 08). Eikonal Tomography of the Southern California Plate Boundary Region . Poster Presentation at 2018 SCEC Annual Meeting.
- 8325 Jiang, J., & Erickson, B. A. (2018, 08). Advancing Simulations of Sequences of Earthquakes and Aseismic Slip [SEAS]. Oral Presentation at 2018 SCEC Annual Meeting.
- 8327 Xie, J., Zimmaro, P., Li, X., & Wen, Z. (2018, 08). Effect of source rupture directivity on the ground shaking from strike-slip earthquakes and its implication for directivity models. Poster Presentation at 2018 SCEC Annual Meeting.
- 8330 Klotsko, S. A., Maloney, J. M., & Watt, J. (2018, 08). Shallow fault mapping in the Sacramento-San Joaquin Delta. Poster Presentation at 2018 SCEC Annual Meeting.
- 8331 Halkia, G., & Grant Ludwig, L. (2018, 08). Communicating Seismological Uncertainty to the Public: A Case Study in Oklahoma. Poster Presentation at 2018 SCEC Annual Meeting.
- 8332 Khoshmanesh, M., Weston, J. M., Shirzaei, M., & Uchida, N. (2018, 08). Periodic Slow Slip Events and Their Interactions with Megathrust Earthquakes on Northeast Japan Subduction Zone. Poster Presentation at 2018 SCEC Annual Meeting.
- 8333 Clayton, R. W., Denolle, M. A., Olsen, K. B., Persaud, P., & Polet, J. (2018, 08). Basin Amplification Seismic INvestigation: tracking the propagation of waves from the San Andreas Fault to Los Angeles. Poster Presentation at 2018 SCEC Annual Meeting.
- 8336 Klinger, Y., Okubo, K., Vallage, A., Champenois, J., Delorme, A., Rougier, E., Lei, Z., Knight, E., Munjiza, A., Satriano, C., Baize, S., Langridge, R. M., & Bhat, H. S. (2018, 08). Earthquake damage patterns resolve complex rupture processes. The 2016 M7.8 Kaikoura earthquake. Poster Presentation at 2018 SCEC Annual Meeting.
- 8339 McPhillips, D., & Scharer, K. M. (2018, 08). Quantifying uncertainty in cumulative surface slip along the Cucamonga Fault, a crustal thrust fault in southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8342 Moschetti, M. P., Hartzell, S., & Herrmann, R. B. (2018, 08). Rupture Model of the 2016 M5.8 Pawnee Induced Earthquake. Poster Presentation at 2018 SCEC Annual Meeting.
- 8344 Pritchard, E. H., Persaud, P., & Stock, J. M. (2018, 08). New Constraints on Stress Heterogeneity along High Risk Fault Systems in the Santa Barbara Channel, California from Borehole Breakouts. Poster Presentation at 2018 SCEC Annual Meeting.

- 8345 Allison, K. L., & Dunham, E. M. (2018, 08). Shear heating and the brittle-ductile transition: thermomechanical earthquake cycle simulations on continental strike-slip faults. Poster Presentation at 2018 SCEC Annual Meeting.
- 8346 Stirling, M. W. (2018, 08). Strong ground motions simulations for Dunedin city, New Zealand: First steps using the SCEC Broadband Simulation Platform. Poster Presentation at 2018 SCEC Annual Meeting.
- 8348 Hughes, A., Rood, D. H., Whittaker, A., Bell, R., Rockwell, T. K., Levy, Y., Wilcken, K., Corbett, L., Bierman, P., DeVecchio, D. E., Marshall, S. T., Gurrola, L. D., & Nicholson, C. (2018, 08). Geomorphic evidence for the geometry and slip rate of the Southern San Cayetano fault: Implications for hazard assessment and fault interaction in complex tectonic environments. Poster Presentation at 2018 SCEC Annual Meeting.
- 8359 Withers, K. B., Moschetti, M. P., & Duru, K. (2018, 08). Broadband Ground Motion and Variability from 3D Dynamic Rupture Simulations along the Wasatch Fault, Utah, incorporating both Stochastic Fault Roughness and Deterministic Long-wavelength Geometry. Poster Presentation at 2018 SCEC Annual Meeting.
- 8361 Hardebeck, J. L., Llenos, A. L., Michael, A. J., Page, M. T., & van der Elst, N. J. (2018, 08). Updated California Aftershock Parameters. Poster Presentation at 2018 SCEC Annual Meeting.
- 8362 Bayless, J. R., & Abrahamson, N. A. (2018, 08). Implementing Inter-Period Correlations into SCEC BBP Simulations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8365 Shearer, P. M., Abercrombie, R. E., Trugman, D. T., & Wang, W. (2018, 08). Testing and Reconciling EGF Methods for Estimating Corner Frequency and Stress Drop from P-wave Spectra. Poster Presentation at 2018 SCEC Annual Meeting.
- 8366 Bray, J. (2018, 08). Assessing Surface Fault Rupture Deformation . Oral Presentation at 2018 SCEC Annual Meeting.
- 8370 Kiuchi, R., Mooney, W. D., & Zahran, H. M. (2018, 08). Probabilistic Seismic Hazard Analysis for Harrat Madinah, Saudi Arabia Using Regional Ground Motion Prediction Equations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8374 Persaud, P., Liu, G., & Clayton, R. W. (2018, 08). Urban Nodal Array Maps Structure of the Northern Los Angeles Basins with Teleseismic Receiver Functions. Poster Presentation at 2018 SCEC Annual Meeting.
- 8376 Fattaruso, L. A. (2018, 08). Lab Talk with Laura: STEM research meets comedy on the radio. Poster Presentation at 2018 SCEC Annual Meeting.
- 8379 Ben-Zion, Y., & Zaliapin, I. (2018, 08). Spatial variations of rock damage production by earthquakes in southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8382 Hatem, A. E., Dolan, J. F., Langridge, R. M., Zinke, R. W., Van Dissen, R. J., McGuire, C. P., & Rhodes, E. J. (2018, 08). Paleoearthquake record of the Conway segment of the Hope fault: Implications for patterns of earthquake occurrence in northern South Island and southern North Island, New Zealand. Poster Presentation at 2018 SCEC Annual Meeting.
- 8383 Wang, W., & Shearer, P. M. (2018, 08). Comparison of Brune-type Stress Drops Estimated from Direct P, S, and Coda Waves. Poster Presentation at 2018 SCEC Annual Meeting.
- 8384 Wang, K., Ellsworth, W. L., Beroza, G. C., Williams, G., Zhang, M., Schroeder, D., & Rubinstein, J. L. (2018, 08). Earthquake catalog reconstruction from analog seismograms: Application to the Rangely Experiment microfilms. Poster Presentation at 2018 SCEC Annual Meeting.
- 8385 Gage, N. S., Wald, D. J., & Marano, K. D. (2018, 08). Aftershock Matters. Poster Presentation at 2018 SCEC Annual Meeting.
- 8386 Ahdi, S. K., Sadiq, S., Ilhan, O., Bozorgnia, Y., Hashash, Y., Kwak, D., Park, D., Yong, A., & Stewart, J. P. (2018, 08). A Proposed Seismic Velocity Profile Database Model. Poster Presentation at 2018 SCEC Annual Meeting.

- 8390 Ogata, Y., Katsura, K., Tsuruoka, H., & Hirata, N. (2018, 08). 3D models of seismicity beneath the Greater Tokyo Area. Poster Presentation at 2018 SCEC Annual Meeting.
- 8393 Wang, K., & Bürgmann, R. (2018, 08). Probing fault frictional properties during afterslip up- and down-dip of the 2017 Mw 7.3 Iran-Iraq earthquake. Poster Presentation at 2018 SCEC Annual Meeting.
- 8394 Qin, L., Johnson, C. W., Vernon, F. L., & Ben-Zion, Y. (2018, 08). Multi-scale study of ground motion coherence in Piñon Flats Observatory. Poster Presentation at 2018 SCEC Annual Meeting.
- 8399 Muir, J. B., & Tsai, V. C. (2018, 08). Geometric and Level Set Tomography for Interface Detection in the Near Surface. Poster Presentation at 2018 SCEC Annual Meeting.
- 8402 Song, Y., Lambert, V. R., & Lapusta, N. (2018, 08). Investigation of Adaptive Time-Stepping Algorithms for Simulating Sequences of Earthquakes and Aseismic Slip (SEAS). Poster Presentation at 2018 SCEC Annual Meeting.
- 8404 Meltzner, A. J. (2018, 08). Coral microatolls as a tool for subduction zone paleoseismology: Identifying rare events along the Sunda megathrust and the Manila trench. Poster Presentation at 2018 SCEC Annual Meeting.
- 8405 Rhoades, D. A., & Christophersen, A. (2018, 08). Improved medium-term earthquake forecasting: Compensating for incomplete contributions of precursory earthquakes. Poster Presentation at 2018 SCEC Annual Meeting.
- 8409 Matsubara, M., & Yano, T. E. (2018, 08). Crustal seismogenic layer at active faults inferred by background seismicity and temperature data in Japan. Poster Presentation at 2018 SCEC Annual Meeting.
- 8410 Karlsson, K. W., Rockwell, T. K., Fletcher, J. M., Gontz, A. M., Figueiredo, P. M., & Owen, L. A. (2018, 08). Paleoseismology and Neotectonics of the Southern Sierra El Mayor, Baja California, Mexico. Poster Presentation at 2018 SCEC Annual Meeting.
- 8412 Li, Y., & Bürgmann, R. (2018, 08). Present day interseismic slip rates of the Xianshuihe Fault observed by InSAR. Poster Presentation at 2018 SCEC Annual Meeting.
- 8416 Goebel, T. H., Rosson, Z., Brodsky, E. E., & Walter, J. I. (2018, 08). Rapid induced seismicity mitigation and its impact on aftershock productivity in Oklahoma. Poster Presentation at 2018 SCEC Annual Meeting.
- 8417 Yin, J., & Denolle, M. A. (2018, 08). Relating teleseismic backprojection images to earthquake kinematics. Poster Presentation at 2018 SCEC Annual Meeting.
- 8419 Lohman, R. B., Jordan, T., & Jiang, J. (2018, 08). Soil moisture effects on InSAR time series in arid regions. Poster Presentation at 2018 SCEC Annual Meeting.
- 8425 Wooddell, K. E., Al Atik, L., & Abrahamson, N. A. (2018, 08). GMPE specific average velocity profiles for developing spatially-varying path coefficients. Poster Presentation at 2018 SCEC Annual Meeting.
- 8411 Don, J., Plesch, A., Newman, M. M., & Shaw, J. H. (2018, 08). Characterizing the 3D geometry of the Ventura-Pitas Point fault system and its implications for earthquake hazards in southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8415 Zinke, R., Hollingsworth, J., Dolan, J. F., & Van Dissen, R. J. (2018, 08). 3D surface deformation in the 2016 MW 7.8 Kaikōura, New Zealand earthquake from optical image correlation: Implications for strain localization and tectonic evolution of the Pacific-Australian plate boundary. Poster Presentation at 2018 SCEC Annual Meeting.
- 8431 Castillo, B. A., McGill, S. F., Scharer, K. M., Yule, D., McPhillips, D., McNeil, J. C., & Pace, A. (2018, 08). Preliminary ages of prehistoric earthquakes on the Banning Strand of the San Andreas Fault, near North Palm Springs, California. Poster Presentation at 2018 SCEC Annual Meeting.

- 8432 Peña, K., McGill, S. F., Rhodes, E. J., Dolan, J. F., Zinke, R., Hatem, A. E., & Brown, N. D. (2018, 08). Paleoseismology of the central Garlock Fault in Searles Valley, California.. Poster Presentation at 2018 SCEC Annual Meeting.
- 8429 Ault, A. K., Jensen, J. L., & McDermott, R. G. (2018, 08). Nanoscale evidence for transient rheology during an earthquake. Poster Presentation at 2018 SCEC Annual Meeting.
- 8436 Peshette, P. L., Lozos, J. C., Yule, D., & Evans, E. L. (2018, 08). Dynamic rupture modeling to investigate the role of fault geometry in jumping rupture between parallel-trace thrust faults. Poster Presentation at 2018 SCEC Annual Meeting.
- 8440 Roh, B., Heaton, T. H., & Ross, Z. E. (2018, 08). Envelope-Based Early Warning Algorithm Using Nested Grid Search. Poster Presentation at 2018 SCEC Annual Meeting.
- 8443 Johnson, C. W., Meng, H., Vernon, F. L., Nakata, N., & Ben-Zion, Y. (2018, 08). Characteristics of ground motion generated by interaction of wind gusts with trees, structures and other obstacles above the surface. Poster Presentation at 2018 SCEC Annual Meeting.
- 8447 Burgette, R. J., Scharer, K. M., Lifton, N., Hanson, A., McPhillips, D., & Rittenour, T. M. (2018, 08). Quaternary Slip History of the Central Sierra Madre Fault, Southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8446 Silva, F., Maechling, P. J., Goulet, C. A., & Vidale, J. E. (2018, 08). The SCEC Broadband Platform: Open-Source Software for Strong Ground Motion Simulation and Validation. Poster Presentation at 2018 SCEC Annual Meeting.
- 8450 Chen, Y., & Baker, J. W. (2018, 08). Spatial correlations in CyberShake physics-based ground motion simulations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8449 Teng, G., & Baker, J. W. (2018, 08). Evaluation of CyberShake ground motions for engineering practice. Poster Presentation at 2018 SCEC Annual Meeting.
- 8452 Dascher-Cousineau, K., Brodsky, E. E., & Lay, T. (2018, 08). Why do strike-slip earthquakes produce fewer aftershocks?. Poster Presentation at 2018 SCEC Annual Meeting.
- 8457 Ward, L., Smith-Konter, B. R., Xu, X., & Sandwell, D. (2018, 08). Strain rate dependence on crustal rheology for the Cajon Pass, California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8458 Ulloa, S., & Lozos, J. C. (2018, 08). Surface Displacement and Ground Motion from Dynamic Rupture Models of Thrust Faults with Variable Dip Angles and Burial Depths. Poster Presentation at 2018 SCEC Annual Meeting.
- 8462 Shen, Z., & Lapusta, N. (2018, 08). Modeling low-frequency earthquakes on a rate-and-state fault. Poster Presentation at 2018 SCEC Annual Meeting.
- 8463 YAO, W., Liu, J., Oskin, M. E., Prush, V. B., Wang, W., & LI, Z. (2018, 08). Re-evaluation of the late-Pleistocene slip rate of the Haiyuan fault near Songshan, Gansu province, China. Poster Presentation at 2018 SCEC Annual Meeting.
- 8466 Wang, W., Zhang, X., Liang, M., & Zhang, J. (2018, 08). Post-seismic deformation mechanism of the Mw 9.0 Tohoku-Oki earthquake detected by GPS and GRACE observations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8469 Meng, H., McGuire, J. J., & Ben-Zion, Y. (2018, 08). Towards Quasi-Automated Estimates of Source Properties of Small to Moderate Southern California Earthquakes with Second Seismic Moments . Poster Presentation at 2018 SCEC Annual Meeting.
- 8473 Lai, V., Zhan, Z., Graves, R. W., & Helmberger, D. V. (2018, 08). Long Shaking Durations within the Los Angeles Basin from Shallow Earthquakes. Poster Presentation at 2018 SCEC Annual Meeting.
- 8477 Zeng, Y., & Petersen, M. D. (2018, 08). Uncertainties in Probabilistic Seismic Hazard Analysis for a Poisson Earthquake Occurrence Model. Poster Presentation at 2018 SCEC Annual Meeting.

- 8476 Hori, T., Ichimura, T., Fujita, K., Yamaguchi, T., Iinuma, T., & Agata, R. (2018, 08). Development of monitoring and forecasting methods for crustal activity utilizing large-scale high-fidelity finite element simulations with 3D heterogeneous medium. Poster Presentation at 2018 SCEC Annual Meeting.
- 8478 van Dinther, Y., Dal Zilio, L., D'Aquisto, M., Herrendörfer, R., & Gerya, T. (2018, 08). On the Role of Temperature and Rheology in Seismicity in Convergent Margins. Oral Presentation at 2018 SCEC Annual Meeting.
- 8479 van Dinther, Y., Künsch, H., & Fichtner, A. (2018, 08). Sequential Data Assimilation for Seismicity: Probabilistic Estimation and Forecasting of Fault Stresses. Poster Presentation at 2018 SCEC Annual Meeting.
- 8483 Taira, T., & Rodgers, A. J. (2018, 08). Evaluating and Improving Ground Motion Predictions for Scenario Earthquakes in The San Francisco East Bay by Integrating Earthquake Ground-Motion Simulations and Noise-Derived Empirical Green's Functions . Poster Presentation at 2018 SCEC Annual Meeting.
- 8488 Singleton, D. M., Rockwell, T. K., & Maloney, J. M. (2018, 08). Sequence of cascading earthquakes on the Newport-Inglewood-Rose Canyon Fault zone from paleoseismic observations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8489 Coffey, G. L. (2018, 08). In search of earthquakes, a biomarker thermal maturity investigation into the seismic potential of the central San Andreas Fault . Poster Presentation at 2018 SCEC Annual Meeting.
- 8427 Smith, I. (2018, 08). Tectonic and geometric constraints for the Wind Canyon fault block on the western Garlock fault: an apatite fission track analysis. Poster Presentation at 2018 SCEC Annual Meeting.
- 8490 Guns, K. A., Bennett, R. A., Blisniuk, K. D., & McGill, S. F. (2018, 08). Investigating strain transfer along faults in Joshua Tree National Park, CA, with possible implications for along strike variations in southern San Andreas Fault slip rate. Poster Presentation at 2018 SCEC Annual Meeting.
- 8491 Tal, Y., Rubino, V., Lapusta, N., & Rosakis, A. J. (2018, 08). Evolution of frictional shear resistance in response to rapid variations of normal stress. Poster Presentation at 2018 SCEC Annual Meeting.
- 8497 Levy, Y., Rockwell, T. K., Shaw, J. H., Plesch, A., Driscoll, N. W., & Perea, H. (2018, 08). Structural Architecture of the Western Transverse Ranges and Potential for Large Earthquakes - New Results of Trishear Forward Models . Poster Presentation at 2018 SCEC Annual Meeting.
- 8499 Kim, Y., Lim, H., Deng, K., Ree, J., & Song, T. (2018, 08). 2017 Mw 5.4 Pohang earthquake, South Korea and poroelastic stress change associated with fluid injection. Poster Presentation at 2018 SCEC Annual Meeting.
- 8500 Montesi, L. G., & Leete, W. (2018, 08). RHEOL_GUI: A Matlab-based graphical user interface for the interactive investigation of strength profiles. Poster Presentation at 2018 SCEC Annual Meeting.
- 8494 Kain, J. O., Persaud, P., & Pritchard, E. H. (2018, 08). Borehole Breakout Determined Stress Regime in the Southern Los Angeles Basin, California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8492 Yu, E., Acharya, P., Bhaskaran, A., Chen, S., Andrews, J. R., Thomas, V., Hauksson, E., & Clayton, R. W. (2018, 08). Cloud Computing and Big Data – Using the Southern California Earthquake Data Center (SCEDC) and the Southern California Seismic Network (SCSN) Products and Services for Earthquake Research. Poster Presentation at 2018 SCEC Annual Meeting.
- 8503 Evans, E. L., & Minson, S. E. (2018, 08). Optimal GNSS observations in Southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8505 Abolfathian, N., Johnson, C. W., & Ben-Zion, Y. (2018, 08). Numerical simulations of stress variations with depth in a model for the San Jacinto fault zone. Poster Presentation at 2018 SCEC Annual Meeting.

- 8508 Nicholson, C., Plesch, A., Shaw, J. H., & Marshall, S. T. (2018, 08). Enhancements, Updates, and Improved Access to the Community Fault Model. Poster Presentation at 2018 SCEC Annual Meeting.
- 8511 Zhai, G., & Shirzaei, M. (2018, 08). Induced Earthquake Forecasting in Oklahoma Using Models of Fluid Diffusion and Earthquake Nucleation. Poster Presentation at 2018 SCEC Annual Meeting.
- 8516 Xie, Y., & Meng, L. (2018, 08). Compressional branching during the 2012 Mw 8.6 Off-Sumatra Earthquake: Implications from Earthquake Cycle Simulations . Poster Presentation at 2018 SCEC Annual Meeting.
- 8518 Burgi, P., & Lohman, R. B. (2018, 08). Quantifying the bias introduced by vegetation in InSAR studies of ground deformation and surface processes. Poster Presentation at 2018 SCEC Annual Meeting.
- 8520 Yu, C., Hauksson, E., Zhan, Z., Cochran, E. S., & Helmberger, D. V. (2018, 08). Absolute and relative focal depth determination of moderate-sized earthquakes: An example from the 2010 El Mayor-Cucapah earthquake sequence. Poster Presentation at 2018 SCEC Annual Meeting.
- 8521 Ma, S., & Nie, S. (2018, 08). Inelastic Wedge Failure and Along-Strike Variations of Tsunami Generation in the Shallow Subduction Zone. Poster Presentation at 2018 SCEC Annual Meeting.
- 8509 Swiatlowski, J. L., & Funning, G. J. (2018, 08). Monitoring Fault Creep on the Hayward Fault using Structure from Motion. Poster Presentation at 2018 SCEC Annual Meeting.
- 8523 Wu, B., Li, B., Oglesby, D. D., & Ghosh, A. (2018, 08). Using Kinematic models to Evaluate the Back Projection Results. Poster Presentation at 2018 SCEC Annual Meeting.
- 8529 Shadoan, T., Carpenter, B. M., Reches, Z., Chen, X., & Zu, S. (2018, 08). Seismic Radiation During Slip Along a Bimaterial Fault: An Experimental Investigation. Poster Presentation at 2018 SCEC Annual Meeting.
- 8530 Wang, Y., Oskin, M. E., & Li, Y. (2018, 08). Deducing Crustal-scale Reverse-Fault Slip Distribution from Folded River Terraces, Qilian Shan, China. Poster Presentation at 2018 SCEC Annual Meeting.
- 8534 Wooten, M. R., Castillo Castellanos, J. A., & Clayton, R. W. (2018, 08). Modeling Crust of Columbia River Basalts Using Ambient Noise Recordings. Poster Presentation at 2018 SCEC Annual Meeting.
- 8533 Calzolari, G. V., Ault, A. K., & Hirth, G. (2018, 08). Preliminary data on detecting asperity flash heating on hematite faults with laboratory experiments and hematite (U-Th)/He thermochronometry. Poster Presentation at 2018 SCEC Annual Meeting.
- 8536 Bradley, B. A., Tarbali, K., Lee, R. L., Huang, J., Lagrava, D., Polak, V., Motha, J., & Bae, S. (2018, 08). Cybershake NZ v18.6: New Zealand simulation-based probabilistic seismic hazard analysis. Poster Presentation at 2018 SCEC Annual Meeting.
- 8540 Ingram, J., Burgette, R. J., & Hampton, B. A. (2018, 08). Quaternary slip history of the Santa Susana fault, western Transverse Ranges: Insights from U-Pb detrital zircon geochronology. Poster Presentation at 2018 SCEC Annual Meeting.
- 8543 Williams, E. F., Zhan, Z., Karrenbach, M., Cole, S., & LaFlame, L. (2018, 08). Dense mapping of shallow velocity structure in the Raymond Basin using the Pasadena Distributed Acoustic Sensing Array. Poster Presentation at 2018 SCEC Annual Meeting.
- 8546 Abrahams, L. S., Allison, K. L., & Dunham, E. M. (2018, 08). Rupture Dynamics at the Interface Between a Thin Compliant Layer and Stiffer Underlying Half-Space. Poster Presentation at 2018 SCEC Annual Meeting.
- 8547 Share, P., Guo, H., Thurber, C. H., Zhang, H., & Ben-Zion, Y. (2018, 08). Seismic imaging of the Southern California plate boundary around the South-Central Transverse Ranges using double-difference tomography and fault zone head waves. Poster Presentation at 2018 SCEC Annual Meeting.
- 8548 Sager, K., Boehm, C., Ermert, L., Krischer, L., & Fichtner, A. (2018, 08). Full waveform ambient noise inversion. Poster Presentation at 2018 SCEC Annual Meeting.

- 8551 Evans, J. P., Reimann, R., Studnicky, C., & Bradbury, K. K. (2018, 08). The composition and structure of shallow portions of the San Andreas and San Gabriel Faults. Poster Presentation at 2018 SCEC Annual Meeting.
- 8552 Thomson, E. M., Bradley, B. A., & Lee, R. L. (2018, 08). The New Zealand Velocity Model (NZVM) Version 2.0 and ground motion simulations of Hope Fault earthquakes. Poster Presentation at 2018 SCEC Annual Meeting.
- 8554 Aagaard, B. T. (2018, 08). Earth Science Research Needs for Improving Earthquake Scenarios. Oral Presentation at 2018 SCEC Annual Meeting.
- 8555 Milliner, C. W., & Donnellan, A. (2018, 08). High Resolution Geodetic Measurements of Co-seismic Fault-zone Deformation for Probabilistic Fault Displacement Hazard Assessment and Confidence Intervals on Geologic Slip Rates. Poster Presentation at 2018 SCEC Annual Meeting.
- 8541 Hu, Z., Roten, D., Olsen, K. B., & Day, S. M. (2018, 08). Kinematic Source Models for Earthquake Simulations with Fault-zone Plasticity. Poster Presentation at 2018 SCEC Annual Meeting.
- 8549 Zhu, W., Allison, K. L., & Dunham, E. M. (2018, 08). Coupled interactions of fluid-pressure and earthquake cycles: Numerical simulations of fault-valve behaviour. Poster Presentation at 2018 SCEC Annual Meeting.
- 8563 Kanaya, T., & Hirth, G. (2018, 08). Mechanics of Fault-Tip Deformation in Brittle and Ductile Faults: Laboratory Test of Off-Fault Yield Models & Fracture Energy Budget. Poster Presentation at 2018 SCEC Annual Meeting.
- 8564 Marshall, S. T., Madden, E. H., Dorsett, J. H., & Cooke, M. L. (2018, 08). Fault linkage through the Imperial Valley, California is required to match current slip rate estimates. Poster Presentation at 2018 SCEC Annual Meeting.
- 8562 Lynch, D. K., Deane, T., Zamora, C., Francuch, D. G., Bailey, J. S., Allen, C. W., Rogers, J. D., & Gouger, C. (2018, 08). A Moving Mud Pot Threatening Railroad Tracks and a Highway, Imperial County, California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8566 Spica, Z., Perton, M., Clayton, R. W., & Beroza, G. C. (2018, 08). Assessing the Deep Geometry of the Los Angeles Basin Using Full H/V Spectral Ratio and Multimode Surface Waves . Poster Presentation at 2018 SCEC Annual Meeting.
- 8565 Gualandi, A., & Liu, Z. (2018, 08). Afterslip and Viscoelastic Processes and Their Relation with Seismic Activity: An Example from the Study of the Mw 7.2 El Mayor-Cucapah Earthquake (Mexico). Poster Presentation at 2018 SCEC Annual Meeting.
- 8569 Dougherty, S. L., Cochran, E. S., Harrington, R. M., & Ross, Z. E. (2018, 08). Tracking thousands of microearthquakes for a month in northern Oklahoma: What a large-N array can reveal about induced seismicity. Poster Presentation at 2018 SCEC Annual Meeting.
- 8560 Tullis, T. E. (2018, 08). Progress Report 2 on Addition of a High-Speed Drive to High-Pressure, Rotary-Shear Apparatus. Poster Presentation at 2018 SCEC Annual Meeting.
- 8568 Jiang, J., & Fialko, Y. (2018, 08). Probing mechanisms of unsteady shallow creep on major crustal faults. Poster Presentation at 2018 SCEC Annual Meeting.
- 8570 Wang, J., & Tanimoto, T. (2018, 08). Mapping Near-Surface Rigidity Structure using Co-located Pressure and Seismic Sensors from the EarthScope Transportable Array. Poster Presentation at 2018 SCEC Annual Meeting.
- 8571 Maneerat, P. (2018, 08). Active Tectonics across the Indo-Burma Range. Poster Presentation at 2018 SCEC Annual Meeting.
- 8574 Idini, B., & Ampuero, J. (2018, 08). Persistent effects of low-velocity fault zones on earthquake rupture after multiple earthquake cycles. Poster Presentation at 2018 SCEC Annual Meeting.

- 8576 Song, S., Yun, K., & Kwak, S. (2018, 08). Investigating the Ground Motion Characteristics of the 2016 Mw 5.5 Gyeongju, South Korea, Earthquake Using the SCEC Broadband Platform. Poster Presentation at 2018 SCEC Annual Meeting.
- 8575 Ajala, R., Persaud, P., Stock, J. M., Fuis, G. S., Hole, J. A., Goldman, M. R., & Scheirer, D. S. (2018, 08). 3-D upper crustal velocity structure of the Coachella Valley, Southern California: results from the salton seismic imaging project. Poster Presentation at 2018 SCEC Annual Meeting.
- 8579 Wang, Y., Day, S. M., & Shearer, P. M. (2018, 08). A Physical Interpretation for Anomalous Source Spectra with a Deficit at Intermediate Frequencies. Poster Presentation at 2018 SCEC Annual Meeting.
- 8578 Yang, Z., Yehya, A., & Rice, J. R. (2018, 08). Effect of fault architecture and permeability evolution on response to fluid injection. Poster Presentation at 2018 SCEC Annual Meeting.
- 8582 Maechling, P. J., Bielak, J., Callaghan, S., Cui, Y., Field, E. H., Goulet, C. A., Graves, R. W., Jordan, T. H., Milner, K. R., Olsen, K. B., Roten, D., Savran, W. H., Silva, F., Su, M., Taborda, R., & Vidale, J. E. (2018, 08). The SCEC Software Ecosystem for Earthquake System Science Research. Poster Presentation at 2018 SCEC Annual Meeting.
- 8586 Nie, S., & Ma, S. (2018, 08). Testing the Amplitude of Ambient-field Green's Function by Simulated Scattered Waves in a 3D Sedimentary Basin . Poster Presentation at 2018 SCEC Annual Meeting.
- 8587 Grenier, M., & Fialko, Y. (2018, 08). Using a dense GPS array as a strain meter on the Anza section of the San Jacinto fault . Poster Presentation at 2018 SCEC Annual Meeting.
- 8588 Meng, L., Zhou, T., Yuqing, X., & Han, J. (2018, 08). Tsunami Source Inversions Using Adjoint-state Methods. Poster Presentation at 2018 SCEC Annual Meeting.
- 8486 Wade, A. (2018, 08). Geologic and Structural Characterization of The Rock Volume Imaged by the Dense Nodal Seismic Array Along the San Jacinto Fault at Sage Brush Flat, Southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8591 Walls, C., Mann, D., Turner, R. C., Lawrence, S., Austin, K., Mattioli, G. S., Dittman, T., & Feaux, K. (2018, 08). The Network of the Americas (NOTA) GNSS Network in California - Providing Reliable Data Streams for Early Warning Applications. Poster Presentation at 2018 SCEC Annual Meeting.
- 8594 Wu, Y. (2018, 08). Pre-seismic and Co-seismic Deformations in the Seismogenic zone of the Lushan MS7.0 earthquake. Poster Presentation at 2018 SCEC Annual Meeting.
- 8593 Bao, H., & Meng, L. (2018, 08). Mitigating Spatial Bias of Back-projections with the Slowness Enhanced Back Projection. Poster Presentation at 2018 SCEC Annual Meeting.
- 8597 Tymofyeyeva, E., Fialko, Y., Jiang, J., Bilham, R., Sandwell, D. T., Rockwell, T. K., Blanton, C. M., & Gontz, A. M. (2018, 08). Geodetic and geologic observations of creep on the Southern San Andreas Fault triggered by the 2017 Chiapas (Mexico) earthquake. Poster Presentation at 2018 SCEC Annual Meeting.
- 8601 Biasi, G. P., & Scharer, K. M. (2018, 08). The Current Unlikely Earthquake Hiatus at California's Transform Boundary Paleoseismic Sites. Poster Presentation at 2018 SCEC Annual Meeting.
- 8605 Schulte-Pelkum, V., Ross, Z. E., Mueller, K. J., & Ben-Zion, Y. (2018, 08). Dipping fault structures near the brittle-ductile transition and deep foliation fabric in southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8606 Li, B., & Ghosh, A. (2018, 08). Delayed Triggering of small Local Earthquakes near the San Jacinto Fault after the 2014 Mw 7.2 Papanoa Earthquake. Poster Presentation at 2018 SCEC Annual Meeting.
- 8609 Williams, A. M., Arrowsmith, R., Rockwell, T. K., Akciz, S. O., & Grant Ludwig, L. (2018, 08). Refining the earthquake chronology of the last millennium along the Cholame segment of the San Andreas fault. Poster Presentation at 2018 SCEC Annual Meeting.

- 8610 Lee, R. L., Bradley, B. A., & Bellagamba, X. (2018, 08). Toward Hybrid Broadband Ground Motion Simulation Validation for Mw>3.5 New Zealand Earthquakes. Poster Presentation at 2018 SCEC Annual Meeting.
- 8612 Meng, X., Goulet, C. A., Milner, K. R., & Callaghan, S. (2018, 08). Preliminary Results on Fully Nonergodic Ground Motion Models in Central California Using NGA-West2 and SCEC CyberShake Datasets. Poster Presentation at 2018 SCEC Annual Meeting.
- 8618 Tang, C., Hsu, Y., Barbot, S. D., Moore, J., & Chang, W. (2018, 08). Lower-crustal rheology and thermal gradient in the Taiwan orogenic belt illuminated by the 1999 Chi-Chi earthquake. Poster Presentation at 2018 SCEC Annual Meeting.
- 8620 Hok, S., Sassi, R., & Klinger, Y. (2018, 08). Investigating and validating surface rupture characteristics with rupture dynamics on faults with shallow complexities. Poster Presentation at 2018 SCEC Annual Meeting.
- 8622 Hashima, A., Sato, H., Ishiyama, T., Freed, A., & Becker, T. W. (2018, 08). Stress accumulation rate on source faults around the junction of Ryukyu and Southwest Japan arcs using finite element model. Poster Presentation at 2018 SCEC Annual Meeting.
- 8627 Viesca, R. C., & Dublanchet, P. (2018, 08). The slow slip of viscous faults. Poster Presentation at 2018 SCEC Annual Meeting.
- 8482 Caklais, A. H., Rood, D. H., Stirling, M. W., Madugo, C. M., Abrahamson, N. A., Wilcken, K., Gonzalez, T., Kottke, A. R., & Whittaker, A. C. (2018, 08). Earthquake hazard assessment evaluated by fragile geologic features in coastal Central California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8624 Bormann, J. M., Kent, G. M., & Driscoll, N. W. (2018, 08). Rupture scenarios for the San Diego Trough and San Pedro Basin fault systems, offshore Southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8630 Kuehn, N. M., Abrahamson, N. A., & Walling, M. (2018, 08). Probabilistic Seismic Hazard Analysis in California Using Non-Ergodic Ground-Motion Prediction Equations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8631 Asimaki, D., & Shi, J. (2018, 08). Nonlinear Fourier-based Amplification Factors for the SCEC Broadband Platform. Poster Presentation at 2018 SCEC Annual Meeting.
- 8633 Chu, S., Beroza, G. C., & Ellsworth, W. L. (2018, 08). Source parameter variability of intraslab earthquakes as determined from the empirical Green's function method. Poster Presentation at 2018 SCEC Annual Meeting.
- 8639 Fischer, T., & Hainzl, S. (2018, 08). Effective stress drop and aseismic deformation. Poster Presentation at 2018 SCEC Annual Meeting.
- 8640 Patyniak, M., Landgraf, A., Arrowsmith, R., Dzhumabaeva, A., Williams, A. M., Abdrakhmatov, K., & Strecker, M. (2018, 08). The Hidden Past of the Alai Valley: Understanding the Seismic History and Behavior of the Central Pamir Frontal Thrust System through Paleoseismology. Poster Presentation at 2018 SCEC Annual Meeting.
- 8642 Nakata, N. (2018, 08). Characterization of high-wavenumber subsurface random heterogeneity using a very dense array at Diablo Canyon, California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8637 Magnani, M. (2018, 08). Can we hide an active fault within a geodetic network? Yes, we can. Poster Presentation at 2018 SCEC Annual Meeting.
- 8643 Chen, J., Luo, M., Qin, J., Yin, J., Owen, L. A., Wang, H., Yang, H., Liu, J., & Zhang, B. (2018, 08). Seismic and aseismic fault slip revealed by luminescence bleaching depth profiles of the bedrock normal fault scarp. Poster Presentation at 2018 SCEC Annual Meeting.
- 8645 Vierra, E. J., Flynn, B. A., Bermudez, M. S., Webb, H. N., Girty, G. H., & Rockwell, T. K. (2018, 08). Assessing off-fault damage during development of a dismembered flower structure. Poster Presentation at 2018 SCEC Annual Meeting.

- 8644 DuRoss, C. B., Gold, R. D., Briggs, R. W., & Bennett, S. E. (2018, 08). Using relative structural complexity of fault segment barriers to model prehistoric earthquake rupture histories. Poster Presentation at 2018 SCEC Annual Meeting.
- 8653 Wu, Q., & Chen, X. (2018, 08). Characteristics of earthquake source complexity in the San Jacinto Fault Zone. Poster Presentation at 2018 SCEC Annual Meeting.
- 8655 Crempien, J. G., & Archuleta, R. J. (2018, 08). Kinematic rupture simulations of earthquakes on multi-segment faults . Poster Presentation at 2018 SCEC Annual Meeting.
- 8656 Wesnousky, S. G., & Biasi, G. P. (2018, 08). How Much Farther? Estimating Rupture Length Probabilities After a Rupture Has Started. Poster Presentation at 2018 SCEC Annual Meeting.
- 8657 Boyd, D., & Bormann, J. M. (2018, 08). Towards characterizing the geometry and potential fault system connectivity at the southern termination of the Palos Verdes fault, offshore southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8661 Kendrick, K. J., & Fumal, T. E. (2018, 08). Paleoseismology of the northern San Jacinto fault, San Bernardino County. Poster Presentation at 2018 SCEC Annual Meeting.
- 8664 Chen, K., Smith, J., Avouac, J., Liu, Z., & Y. Tony, S. (2018, 08). Magma movement from Nāpau down to Leilani Triggered the 4th May 2018 Mw 7.0 Hawaii earthquake. Poster Presentation at 2018 SCEC Annual Meeting.
- 8660 Graves, R. W. (2018, 08). Sampling Parametric Rupture Variability using Broadband Ground Motion Simulations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8651 Luginbuhl, M., Rundle, J. B., & Turcotte, D. L. (2018, 08). Nowcasting Induced Seismicity at the Groningen gas field in the Netherlands . Poster Presentation at 2018 SCEC Annual Meeting.
- 8659 Kluesner, J. W., Brothers, D. S., Wright, A., & Johnson, S. (2018, 08). 3D insights into active deformation, stratigraphic architecture, and submarine slope failure in the Santa Barbara Channel, southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8667 Ma, X., & Elbanna, A. E. (2018, 08). Modeling Dynamic Ruptures with High Resolution Fault Zone Physics. Poster Presentation at 2018 SCEC Annual Meeting.
- 8669 Allevato, A., Clayton, R. W., & Weeraratne, D. S. (2018, 08). New techniques in point cloud analysis of high-density seismic array data to determine three dimensional fault and crustal structures in the Long Beach Basin. Poster Presentation at 2018 SCEC Annual Meeting.
- 8671 Page, M. T., & van der Elst, N. J. (2018, 08). Faulty Intuition about b-values and Aftershock Productivity within a Fault Network. Poster Presentation at 2018 SCEC Annual Meeting.
- 8674 Fialko, Y., & Tymofyeyeva, E. (2018, 08). Measurements of 3-component, time-dependent deformation using Sentinel-1 SAR interferometry and continuous GPS data. Poster Presentation at 2018 SCEC Annual Meeting.
- 8675 van der Elst, N. J., Milner, K. R., Field, E. H., McBride, S. K., & Page, M. T. (2018, 08). New software for computing time dependent seismic hazard during aftershock sequences using the OpenSHA platform. Poster Presentation at 2018 SCEC Annual Meeting.
- 8676 Abdelmeguid, M., Ma, X., & Elbanna, A. E. (2018, 08). A novel hybrid numerical finite element-spectral boundary integral scheme for modeling earthquake cycles. Poster Presentation at 2018 SCEC Annual Meeting.
- 8679 Hao, J., Deng, W., & Ji, C. (2018, 08). The rupture process of 2018 Mw 7.0 Kalapana, Hawaii earthquake and relation with the 1975 event. Poster Presentation at 2018 SCEC Annual Meeting.
- 8683 Milner, K. R., Shaw, B. E., Jordan, T. H., Callaghan, S., & Goulet, C. A. (2018, 08). Fully physics-based PSHA: coupling RSQSim with deterministic ground motion simulations. Poster Presentation at 2018 SCEC Annual Meeting.

- 8690 Vandever, I., Anderson, A. K., Okamoto, T., & Tanimoto, T. (2018, 08). Enhancing 0.4-1.0 Hz seismic signals in Green's functions through judicious selection of time intervals. Poster Presentation at 2018 SCEC Annual Meeting.
- 8689 Bachhuber, J. L., De Pascale, G. P., Rathje, E., Little, m., Almond, P., Ruegg, C., & Finnemore, M. (2018, 08). Contemporary and Paleoliquefaction Induced Lateral Spreading in Christchurch New Zealand. Poster Presentation at 2018 SCEC Annual Meeting.
- 8694 O'Reilly, O., Breuer, A. N., Cui, Y., Goulet, C. A., & Olsen, K. B. (2018, 08). Towards topography in AWP-ODC. Poster Presentation at 2018 SCEC Annual Meeting.
- 8693 Shen, Z., & Zeng, Y. (2018, 08). Decadal variation of crustal deformation in California inferred from EDM and GPS and its implication to seismic hazard. Poster Presentation at 2018 SCEC Annual Meeting.
- 8691 Dieterich, J. H. (2018, 08). Earthquake and fault system dynamics – Putting the pieces together. Oral Presentation at 2018 SCEC Annual Meeting.
- 8684 Helgans, E. C., Luttrell, K. M., & Smith-Konter, B. R. (2018, 08). Multicomponent Model of Crustal Stress at Cajon Pass with Implications for Stress Field Heterogeneity. Poster Presentation at 2018 SCEC Annual Meeting.
- 8688 Murray, K. D., & Lohman, R. B. (2018, 08). Recent spatiotemporal evolution of deformation in the Los Angeles Basin and southern Central Valley of California in the context of anthropogenic activity. Poster Presentation at 2018 SCEC Annual Meeting.
- 8695 Jiang, X., & Meng, L. (2018, 08). Exploration of Prompt Elastogravity Signal for the 2004 M9.0 Sumatra and 2010 M8.8 Maule Earthquakes. Poster Presentation at 2018 SCEC Annual Meeting.
- 8699 Becker, T. W., Schulte-Pelkum, V., Behr, W. M., Porritt, R., & Miller, M. S. (2018, 08). Orientation of faults, fault roots, rock fabric, stress, and deformation in Southern California: Geographical comparisons and field and numerical experiments. Poster Presentation at 2018 SCEC Annual Meeting.
- 8696 Hearn, E. H., Oskin, M. E., Thatcher, W. R., Hirth, G., Behr, W. M., & Legg, M. R. (2018, 08). Progress toward a Community Rheology Model of Southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8704 Scharer, K. M. (2018, 08). Paleoeearthquakes within 100 km and 1000 years of modern Cajon Pass, California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8701 Lawson, M. J., Okubo, S. G., Schlom, T. M., Rhodes, E. J., Knott, J., & Yin, A. (2018, 08). Complex faulting structures in Eureka Valley, Death Valley National Park, CA. Poster Presentation at 2018 SCEC Annual Meeting.
- 8705 Shakibay Senobari, N., Funning, G., Zimmerman, Z., Zhu, Y., & Keogh, E. (2018, 08). The Similarity Matrix Profile, an efficient method for detecting both low and high signal to noise ratio seismic events in very long time series. Poster Presentation at 2018 SCEC Annual Meeting.
- 8692 Maher, E. L., Smith, K. D., Hatch, R. L., Graham, K. M., Driscoll, N. W., & Conway, N. (2018, 08). Two Moho-Depth Earthquake Swarms along the Sierra Microplate Basin and Range Boundary Region. Poster Presentation at 2018 SCEC Annual Meeting.
- 8711 Parker, J. W., Lyzenga, G. A., Donnellan, A., Glasscoe, M. T., Pierce, M. E., Wang, J., Barba, M., & Tiampo, K. F. (2018, 08). Salton Trough Deformation in GeoGateway Tools, UAVSAR and GeoFEST. Poster Presentation at 2018 SCEC Annual Meeting.
- 8715 Liu, D., Duan, B., & Luo, B. (2018, 08). A Dynamic Earthquake Simulator for Geometrically Complex Faults Governed by Rate- and State- Friction. Poster Presentation at 2018 SCEC Annual Meeting.
- 8717 Brodsky, E. E., & Goebel, T. H. (2018, 08). The spatial footprint of injection wells in a global compilation of induced earthquake sequences. Poster Presentation at 2018 SCEC Annual Meeting.

- 8718 Kozdon, J. E., & Erickson, B. A. (2018, 08). An Efficient Numerical Method for the Simulation of Earthquake Cycles in Complex Geometries. Poster Presentation at 2018 SCEC Annual Meeting.
- 8686 Elbanna, A. E., Hajarolasvadi, S., Ma, X., Abdelmeguid, M., Kammer, D., Albertini, G., Haber, B., & Madhukar, A. (2018, 08). Modeling Earthquake Mechanics with High Resolution Fault Zone Physics: New Computational Tools for Addressing The Conundrum of Scales. Poster Presentation at 2018 SCEC Annual Meeting.
- 8722 Weeraratne, D. S., Amodeo, K., Rathnayaka, S., Lennin, E., Gomez, C. D., & Kohler, M. D. (2018, 08). Shear wave velocity structure of a remnant slab beneath the western Transverse Ranges offshore southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8709 Yang, L., Beroza, G. C., & Zhao, L. (2018, 08). Detecting the Earth's Interior Structure Using Reverse-Time Migration Based on Wavefield Normalized Cross-Correlation Imaging Condition. Poster Presentation at 2018 SCEC Annual Meeting.
- 8724 Burns, J. E., McGill, S. F., Rhodes, E. J., Dolan, J. F., & Brown, N. D. (2018, 08). Dating of Offset Geomorphic Features Along the Garlock Fault, Mojave Desert, California: Testing a Proposed Earthquake Supercycle Model. Poster Presentation at 2018 SCEC Annual Meeting.
- 8702 Young, E. K., Cowgill, E. S., & Scharer, K. M. (2018, 08). Holocene slip rates along the Mojave Section of the San Andreas fault. Poster Presentation at 2018 SCEC Annual Meeting.
- 8730 Scott, C. P., Toke, N. A., Bunds, M., & Shirzaei, M. (2018, 08). Creep Along the Central San Andreas Fault Measured from Surface Cracks, 3D Topographic Differencing, and UAVSAR imagery. Poster Presentation at 2018 SCEC Annual Meeting.
- 8732 Conrad, J., Brothers, D. S., Walton, M. L., Sliter, R. W., & Dartnell, P. (2018, 08). Seafloor scarps, stepover geometry, and kinematics of the Newport-Inglewood fault zone offshore Oceanside, California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8713 Guo, H., Huang, H., Feng, T., & Meng, L. (2018, 08). Machine Learning in detecting Low-frequency Earthquakes in Shikoku, Japan. Poster Presentation at 2018 SCEC Annual Meeting.
- 8733 Kim, J., Bahadori, A., & Holt, W. E. (2018, 08). Monitoring Seasonally-Driven Stress Changes on Faults within the Plate Boundary Zone in California using cGPS Observations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8737 Kroll, K. A., Dieterich, J. H., Richards-Dinger, K. B., & Oglesby, D. D. (2018, 08). 3D Ruptures Simulations Across Stepping Faults; Comparing the Slip Weakening and Rate-State Friction. Poster Presentation at 2018 SCEC Annual Meeting.
- 8735 Reitman, N., Mueller, K. J., Tucker, G. E., & Barnhart, K. R. (2018, 08). Are offset channels accurate representations of strike-slip fault displacement? Implications from landscape evolution modeling. Poster Presentation at 2018 SCEC Annual Meeting.
- 8736 Holt, W. E., Montesi, L. G., & Bahadori, A. (2018, 08). Lithosphere Viscosity Variations in Southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8714 Fildes, R. A., Kellogg, L. H., Turcotte, D. L., & Rundle, J. B. (2018, 08). Statistics of seismicity associated with a sequence of explosive eruptions at Kilauea, Hawaii. Poster Presentation at 2018 SCEC Annual Meeting.
- 8741 Feng, T., & Meng, L. (2018, 08). Combining back-projection and matched filter in detecting offshore seismicity: Application to NE Japan subduction zone. Poster Presentation at 2018 SCEC Annual Meeting.
- 8617 Burkhard, L., Smith-Konter, B. R., Ward, L., Scharer, K. M., & Sandwell, D. T. (2018, 08). Earthquake cycle stress accumulation disparities of the Cajon Pass region. Poster Presentation at 2018 SCEC Annual Meeting.
- 8746 Smith-Konter, B. R., Xu, X., Ward, L., Burkhard, L., & Sandwell, D. T. (2018, 08). InSAR/GPS time series deformation of the 2018 Kilauea event: Preparation for a large Southern California event. Poster Presentation at 2018 SCEC Annual Meeting.

- 8727 Liu, X., & Beroza, G. C. (2018, 08). Finite Frequency Sensitivity Kernel for the Correlation of Ambient Noise Correlations: Theory and Numerical Tests. Poster Presentation at 2018 SCEC Annual Meeting.
- 8747 Bahadori, A., Holt, W. E., Kim, J., Rasbury, T., Shen, W., & Grossman, J. (2018, 08). The role of rheological evolution on active deformation of Southwestern North America within the Pacific-North America Plate Boundary Zone since the Oligocene. Poster Presentation at 2018 SCEC Annual Meeting.
- 8629 Gabriel, A., Wollherr, S., Ulrich, T., Madden, E. H., Duru, K., & Li, D. (2018, 08). Unraveling earthquake dynamics through large-scale multi-physics simulations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8742 Legg, M. R., & Oskin, M. E. (2018, 08). Offshore Geology Framework for the Community Rheology Model. Poster Presentation at 2018 SCEC Annual Meeting.
- 8752 Callaghan, S., Maechling, P. J., Goulet, C. A., Milner, K. R., Su, M., Graves, R. W., Olsen, K. B., Aagaard, B. T., Wooddell, K. E., Kottke, A. R., Jordan, T. H., & Vidale, J. E. (2018, 08). A SCEC CyberShake Physics-Based Probabilistic Seismic Hazard Model for Northern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8753 Morelan, A. E., & Oskin, M. E. (2018, 08). Modal mineralogy of the continental crust and implications for fault-zone rheology: Data mining the Southern Sierra Nevada exhumed crustal section. Poster Presentation at 2018 SCEC Annual Meeting.
- 8748 Jordan, T. H., & Juarez, A. (2018, 08). Stress-glut representation by orthogonal moment-tensor fields. Poster Presentation at 2018 SCEC Annual Meeting.
- 8754 Bianco, M. J., Olsen, K. B., Gerstoft, P., & Lin, F. (2018, 08). Machine learning-based surface wave tomography of Long Beach, CA, USA. Poster Presentation at 2018 SCEC Annual Meeting.
- 8757 Badt, N. Z., Tullis, T. E., & Hirth, G. (2018, 08). Thermal pressurization evolution with total slip. Poster Presentation at 2018 SCEC Annual Meeting.
- 8760 Breuer, A. N., Heinecke, A., & Cui, Y. (2018, 08). Fused Earthquake Simulations on Deep Learning Hardware. Poster Presentation at 2018 SCEC Annual Meeting.
- 8758 Hatch, J. L., & Cooke, M. L. (2018, 08). Assessing kinematic compatibility of fault geometry and slip rates along the southern San Andreas fault system in the San Geronimo Pass region. Poster Presentation at 2018 SCEC Annual Meeting.
- 8764 Fan, W., & McGuire, J. J. (2018, 08). Investigating microearthquake finite source attributes with IRIS Community Wavefield Demonstration Experiment in Oklahoma. Poster Presentation at 2018 SCEC Annual Meeting.
- 8765 Hauksson, E., Ross, Z. E., & Cochran, E. S. (2018, 08). Sudden Surges of Seismicity within Natural Slow Growing and Long Duration Seismicity Swarms near Cahuilla Valley in the Central Peninsular Ranges, Southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8725 Plesch, A., Shaw, J. H., SCFM Working Group, ..., & Nicholson, C. (2018, 08). SCFM 3.1: Updates, maps and modeling support. Poster Presentation at 2018 SCEC Annual Meeting.
- 8773 Baden, C. W., & Hillel, G. E. (2018, 08). Contrasts in integrated crustal strength drive the asymmetric distribution of topography and deformation within restraining bends. Poster Presentation at 2018 SCEC Annual Meeting.
- 8767 Figueiredo, P. M., Weldon, R. J., & Owen, L. A. (2018, 08). Revisiting the Cajon Pass Quaternary Terraces with Geochronology dating implications for the long term slip rates of the San Jacinto and San Andreas systems. Poster Presentation at 2018 SCEC Annual Meeting.
- 8756 Saunders, J. K., Martinez, F., Haase, J. S., & Soliman, M. (2018, 08). Simulated ground motions for induced seismicity at a 12-story structure in Oklahoma using the SCEC Broadband Platform. Poster Presentation at 2018 SCEC Annual Meeting.

- 8749 Cattania, C., & Segall, P. (2018, 08). Crack models of repeating earthquakes predict observed moment-recurrence scaling. Poster Presentation at 2018 SCEC Annual Meeting.
- 8720 Hatch, R. L., Abercrombie, R. E., Ruhl, C. J., & Smith, K. D. (2018, 08). Characteristics of Three Small ($M_w < 4.5$) Urban Area Sequences in the Walker Lane: Earthquake Interaction, Fault Structure, and Source Properties. Poster Presentation at 2018 SCEC Annual Meeting.
- 8775 Pauk, E., Huynh, T. T., Milner, K. R., Callaghan, S., Gill, D., Goulet, C. A., & Crouse, C. (2018, 08). Developing Software to Support SCEC Research Collaborations and Data Dissemination: A Case Study of the Committee for the Utilization of Ground Motion Simulations (UGMS) Project. Poster Presentation at 2018 SCEC Annual Meeting.
- 8774 Donnellan, A., Parker, J. W., Heflin, M. B., Rundle, J. B., Grant Ludwig, L., & Lyzenga, G. A. (2018, 08). Deformation in the Yuha Desert from the 2010 M7.2 El Mayor – Cucapah Earthquake . Poster Presentation at 2018 SCEC Annual Meeting.
- 8779 Inserra, N. J., & Akciz, S. O. (2018, 08). Late Holocene Rupture History of the South-Central San Andreas Fault at the Van Matre Ranch site, Carrizo Plain, California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8673 Thomann, C., Jänecke, S. U., Markowski, D., Evans, J. P., & Quinn, R. (2018, 08). Unraveling a tectonic knot: structural domains, voluminous fault zones, creep, and dispersed strain between the San Andreas Fault and Brawley Seismic Zone. Poster Presentation at 2018 SCEC Annual Meeting.
- 8632 Santullo, L. M., Elbanna, A. E., & Hajarolasvadi, S. (2018, 08). Nonlinear Modeling of High-Rise Buildings Subject to Long-Period Ground Motion. Poster Presentation at 2018 SCEC Annual Meeting.
- 8784 Oglesby, D. D., Kyriakopoulos, C., Rockwell, T. K., Meltzner, A. J., Barall, M., & Fletcher, J. (2018, 08). Dynamic rupture and cross-fault activation: the effect of high pre-stress contrast. Poster Presentation at 2018 SCEC Annual Meeting.
- 8785 Lozos, J. C. (2018, 08). The Effect of Along-Strike Variation in Dip on Rupture Propagation on Strike-Slip Faults. Poster Presentation at 2018 SCEC Annual Meeting.
- 8786 Prush, V. B., & Oskin, M. E. (2018, 08). Dear Prudence: how many surface clasts are required to yield an accurate exposure date?. Poster Presentation at 2018 SCEC Annual Meeting.
- 8788 Huang, H., & Meng, L. (2018, 08). Matched-filter Detection of Microseismicity Around the Eruption of the 2018 Kilauea Volcano, Hawaii. Poster Presentation at 2018 SCEC Annual Meeting.
- 8734 Thio, H., & Bayless, J. R. (2018, 08). Sensitivities and Uncertainties in Probabilistic Fault Displacement Hazard Analysis in Southern California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8445 Retailleau, L., & Beroza, G. C. (2018, 08). Towards Structural Imaging Using Scattering Artifacts Detected in Ambient Field Correlations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8794 Chen, X., & Abercrombie, R. E. (2018, 08). Applying improved spectral analysis to an induced earthquake sequence in Oklahoma and implications on earthquake triggering. Poster Presentation at 2018 SCEC Annual Meeting.
- 8793 Walker, R. L., Samnejad, M., & Aminzadeh, F. (2018, 08). Understanding Injection-induced Seismicity Effects on Fault Damage Zones: Beyond Poroelastic Models. Poster Presentation at 2018 SCEC Annual Meeting.
- 8792 Tyagi, A. D., Grenier, M., Kreuziger, R., Kays, J. S., & Polet, J. (2018, 08). Preliminary Site Response Results across the San Gabriel and San Bernardino Basins Utilizing the Ambient Noise Spectral Ratio Method. Poster Presentation at 2018 SCEC Annual Meeting.
- 8796 Bedford, J., & Faulkner, D. (2018, 08). The effect of grain size and gouge microstructure on fault slip behavior. Poster Presentation at 2018 SCEC Annual Meeting.

- 8682 Rattez, H., Stefanou, I., Sulem, J., Veveakis, M., & Poulet, T. (2018, 08). Multi-physical couplings and microstructure size effects on the localization of deformation in a fault core. Poster Presentation at 2018 SCEC Annual Meeting.
- 8803 Luttrell, K. M., & Hardebeck, J. L. (2018, 08). Estimates of Shallow Crustal Stress Heterogeneity Length Scale from Borehole Breakouts and Local Earthquake Focal Mechanism Inversions in the Los Angeles Basin. Poster Presentation at 2018 SCEC Annual Meeting.
- 8780 Savage, H. M., Williams, R., & Rowe, C. D. (2018, 08). Gouge Development in the San Andreas Fault from Lake Elizabeth core samples. Poster Presentation at 2018 SCEC Annual Meeting.
- 8807 Allam, A. A., Sorscher, A., Armstrong, A., Richards, C., McKell, A., & Clairmont, S. (2018, 08). Precariously Balanced Rocks in northern Utah: are Wasatch Fault earthquakes worse than expected?. Poster Presentation at 2018 SCEC Annual Meeting.
- 8798 Wollherr, S., Gabriel, A., & Mai, P. M. (2018, 08). Landers 1992 "reloaded": an integrative dynamic earthquake rupture model. Poster Presentation at 2018 SCEC Annual Meeting.
- 8768 Bryan, J. T., Breuer, A. N., & Cui, Y. (2018, 08). Towards Seismic Inverse Problems Using Deep Learning. Poster Presentation at 2018 SCEC Annual Meeting.
- 8806 Mendoza, M. M., Li, B., Ghosh, A., Karplus, M. S., Nabelek, J., Sapkota, S. N., Adhikari, L. B., Klemperer, S. L., & Velasco, A. A. (2018, 08). Capturing Frictional Asperities along the Complex Structure of the Main Himalayan Thrust in Nepal after the 2015 Mw 7.8 Gorkha Earthquake. Poster Presentation at 2018 SCEC Annual Meeting.
- 8811 Fulton, P. M., Kuo, S., Kitajima, H., & Liu, X. (2018, 08). Does effective stress have reduced sensitivity to pore pressure at seismogenic depths?. Poster Presentation at 2018 SCEC Annual Meeting.
- 8789 Seitz, G. G., & Schwartz, D. P. (2018, 08). When do San Andreas Fault ruptures diverge on to other faults?. Poster Presentation at 2018 SCEC Annual Meeting.
- 8804 Avouac, J., Michel, S. G., & Gualandi, A. (2018, 08). Slow Slip Events: Earthquakes in Slow Motion. Poster Presentation at 2018 SCEC Annual Meeting.
- 8755 Torres Andrade, E., Funning, G., & Swiatlowski, J. L. (2018, 08). Updating GPS site positions and velocities and improving GPS coverage in southern California for the Community Geodetic Model. Poster Presentation at 2018 SCEC Annual Meeting.
- 8791 Toke, N. A., Marchetti, D. W., Bailey, C. M., Biek, R., Phillips, J., Bartram, H., & Forster, C. (2018, 08). The Thousand Lake Fault: Earthquake Geology of a Long Recurrence Normal Fault at the Eastern Edge of the Basin and Range. Poster Presentation at 2018 SCEC Annual Meeting.
- 8808 Okaya, D. A., Chiang, Y., Maechling, P. J., & Su, M. (2018, 08). California Transverse Mercator projection (CATM) for Building Gridded Seismic Velocity Volumes for Seismic Wave Propagation Simulations. Poster Presentation at 2018 SCEC Annual Meeting.
- 8805 Savran, W. H., Maechling, P. J., Werner, M. J., Jordan, T. H., Schorlemmer, D., Rhoades, D. A., Marzocchi, W., Yu, J., & Vidale, J. E. (2018, 08). The Collaboratory for the Study of Earthquake Predictability version 2.0 (CSEP2.0): New Capabilities in Earthquake Forecasting and Testing . Poster Presentation at 2018 SCEC Annual Meeting.
- 8731 Roten, D., Olsen, K. B., Day, S. M., & Cui, Y. (2018, 08). Implementation of Iwan-type Plasticity Model in AWP-ODC. Poster Presentation at 2018 SCEC Annual Meeting.
- 8815 Logsdon, R., Walker, R. L., & Gibbons, S. (2018, 08). Building Earthquake Early Warning Networks With Low Cost, Off-the-Shelf Components. Poster Presentation at 2018 SCEC Annual Meeting.
- 8467 Gontz, A. M., Blanton, C. M., Rockwell, T. K., & Kelly, J. T. (2018, 08). Looking Ahead by Looking Down – Potential Applications of Very High Resolution Drone-Based Imagery for Tectonic Geomorphology. Poster Presentation at 2018 SCEC Annual Meeting.
- 8814 Bhattacharya, P., & Viesca, R. C. (2018, 08). Fluid-induced aseismic slip can outpace pore-fluid migration – evidence from in situ data. Poster Presentation at 2018 SCEC Annual Meeting.

- 8809 Barth, N. C., Howarth, J., Richards-Dinger, K. B., Fitzsimons, S., & Biasi, G. P. (2018, 08). Forecasting earthquake behavior on the Alpine Fault, New Zealand. Poster Presentation at 2018 SCEC Annual Meeting.
- 8817 Ford, H. A. (2018, 08). Preliminary evidence for localized lithospheric deformation in the western Basin and Range and Walker Lane from Ps receiver function analysis. Poster Presentation at 2018 SCEC Annual Meeting.
- 8820 Condon, S. J. (2018, 08). Revisiting historical earthquakes in our backyard: 1925 Santa Barbara and 1952 Kern County. Poster Presentation at 2018 SCEC Annual Meeting.
- 8787 Cui, Y., Breuer, A. N., Konwar, R., & Lenz, D. (2018, 08). Unified and Continuous Software Development for AWP-ODC-OS. Poster Presentation at 2018 SCEC Annual Meeting.
- 8822 Miranda, E., & Perez-Huerta, A. (2018, 08). Fluid-enhanced grain boundary sliding in pseudotachylyte survivor clasts: does creep cavitation lead to earthquake rupture?. Poster Presentation at 2018 SCEC Annual Meeting.
- 8825 Sutkowski, C. S., Prado, O., Hernandez, V., & Polet, J. (2018, 08). Preliminary Results of a Study to Identify Archaeological Artifacts from San Salvador in Colton, CA, Using Ground Penetrating Radar. Poster Presentation at 2018 SCEC Annual Meeting.
- 8744 Faherty, D., Petrashek, S. R., Contreras, R., & Pulver, N. W. (2018, 08). Characterization of Faulting at the San Andreas Oasis in the Dos Palmas Preserve Using Ground-based Magnetics, VLF and DC Resistivity. Poster Presentation at 2018 SCEC Annual Meeting.
- 8542 Haddon, E. K., Miller, D. M., Langenheim, V. E., Liu, T., Wan, E., & Walkup, L. C. (2018, 08). Distributed fault slip in the Eastern California shear zone: adding a piece to the puzzle. Poster Presentation at 2018 SCEC Annual Meeting.
- 8829 Kyriakopoulos, C., & Oglesby, D. D. (2018, 08). Combining 3D printing and virtual reality goggles in outreach and communication events . Poster Presentation at 2018 SCEC Annual Meeting.
- 8830 Scott, T. R., Arrowsmith, R., Scott, C. P., & Lao Davila, D. (2018, 08). Detailed mapping of normal fault array geometry using dm-scale high resolution topographic imagery from the Volcanic Tablelands, Bishop, California. Poster Presentation at 2018 SCEC Annual Meeting.
- 8833 Mirkhanian, M. A., Grant Ludwig, L., Donnellan, A., Parker, J. W., & Granat, R. A. (2018, 08). Using GeoGateway Data to Explore Deformation in the Cajon Pass Region. Poster Presentation at 2018 SCEC Annual Meeting.
- 8834 Smith, D. E., Kohler, M. D., Andrews, J. R., Chung, A. I., Hartog, R., Henson, I., Given, D. D., & Guiwits, S. (2018, 08). ShakeAlert v. 2.0 Testing and Certification. Poster Presentation at 2018 SCEC Annual Meeting.
- 8837 Meier, M., Ross, Z. E., Ramachandran, A., Balakrishna, A., Kundzicz, P., Nair, S., Li, Z., Hauksson, E., & Heaton, T. H. (2018, 08). Reliable Real-Time Signal/Noise Discrimination with Deep and Shallow Machine Learning Classifiers. Poster Presentation at 2018 SCEC Annual Meeting.
- 8838 Esmaeilzadeh Seylabi, E., Restrepo, D., Asimaki, D., & Taborda, R. (2018, 08). Modeling shallow crustal nonlinearity in physics-based earthquake simulations: Beyond perfect plasticity. Poster Presentation at 2018 SCEC Annual Meeting.
- 8839 Shaw, B. E. (2018, 08). Earthquake Simulators are Ready for Prime Time. Oral Presentation at 2018 SCEC Annual Meeting.
- 8840 Faulkner, D., Rempe, M., Bedford, J., Sanchez-Roa, C., Boulton, C., & den Hartog, S. (2018, 08). On the possibility of earthquake rupture through clay-rich faults. Oral Presentation at 2018 SCEC Annual Meeting.
- 8841 Lapusta, N. (2018, 08). On the present and future of physics-based earthquake source modeling. Oral Presentation at 2018 SCEC Annual Meeting.

- 8843 Guerra, A. A., Ho, B. T., Kababjyan, V., Mei, R., Mizutani, T., Streitenberger, T., Weerasooriya, S., Wolz, J., Beas, G., Wang, S., Kashyap, A., & Gilchrist, J. J. (2018, 08). 2018 USEIT: Using Machine Learning to Forecast Earthquakes. Poster Presentation at 2018 SCEC Annual Meeting.
- 8848 Aho, M. (2018, 08). Where We Have Been, Where We Are Going... And How We Can Work Together. Oral Presentation at 2018 SCEC Annual Meeting.
- 8913 Sleep, N. H., & Nakata, N. (2018). Nonlinear Body Waves In The Shallow Subsurface, Implications Of Flow-law Rheologies. Oral Presentation at 11th National Conference in Earthquake Engineering, Earthquake Engineering Research Institute .
- 8936 Saxena, S., Anderson, J. G., & Motamed, R. (2017, 06). Incorporation of Site-Specific Attenuation Model using Kappa in Broadband Simulations. Oral Presentation at 11th National Conference on Earthquake Engineering.
- 8958 Porter, K. A., Farokhnia, K., Cho, I., Rossetto, T., Ioannou, I., Grant, D., Jaiswal, K., Wald, D. J., D'Ayala, D., Meslem, A., So, E., Kiremidjian, A. S., & Noh, H. (2012, 09). Global vulnerability estimation methods for the global earthquake model. Oral Presentation at 15th World Conference on Earthquake Engineering.
- 8969 Nayak, A., Thurber, C. H., Fang, H., Zeng, X., & Zhang, H. (2018, 12). Surface-wave and Body-wave Tomography for Central California. Oral Presentation at American Geophysical Union.
- 8991 Jordan, T. H., Callaghan, S., Graves, R. W., Wang, F., Milner, K. R., Goulet, C. A., Maechling, P. J., Olsen, K. B., Cui, Y., Juve, G., Vahi, K., Yu, J., Deelman, E., & Gill, D. (2018, 06). CyberShake Models of Seismic Hazards in Southern and Central California. Oral Presentation at Eleventh U.S. National Conference on Earthquake Engineering.
- 8994 Silva, F., Maechling, P. J., Goulet, C. A., Jordan, T. H., Graves, R. W., Olsen, K. B., Archuleta, R. J., Atkinson, G. M., Pitarka, A., Anderson, J. G., & Song, S. (2018, 06). Using the SCEC Broadband Platform for Strong Ground Motion Simulation and Validation. Poster Presentation at 11th National Conference on Earthquake Engineering.
- 9004 Idini, B., & Ampuero, J. (2018). Rupture Complexity Promoted by Damaged Fault Zones in Earthquake Cycle Models. Poster Presentation at AGU Fall Meeting 2017 .
- 9025 Lin, J. C., Moon, S., Yong, A., Meng, L., Martin, A., & Davis, P. (2017, 12). Linking subsurface and surface processes: Implications for seismic hazards in southern California. Poster Presentation at American Geophysical Union.
- 9030 Helgans, E. C., Luttrell, K. M., & Smith-Konter, B. R. (2018, 12). Multicomponent Model of Crustal Stress at Cajon Pass with Implications for Stress Field Heterogeneity. Poster Presentation at Fall AGU Meeting.
- 9033 Luttrell, K. M., & Hardebeck, J. L. (2019, 04). Heterogeneity of Shallow Crustal Stress Estimated from Borehole Breakouts and Local Earthquake Focal Mechanism Inversions in the Los Angeles Basin. Oral Presentation at SSA Annual Meeting.
- 9035 Abercrombie, R. E. (2018, 12). Towards Improved stress drop measurement: a detailed comparison of contrasting approaches. Oral Presentation at 2018 Fall Meeting, American Geophysical Union.
- 9042 Chen, X., & Abercrombie, R. E. (2018, 12). Applying improved spectral analysis to an induced earthquake sequence in Oklahoma and implications on earthquake triggering. Oral Presentation at American Geophysical Union.
- 9044 Zhang, J., Chen, X., & Abercrombie, R. E. (2018, 12). Robust Analysis of Stress Drop Variation along San Andreas Fault at Parkfield Using Multiple Local Networks. Poster Presentation at American Geophysical Union.
- 9083 Breuer, A. N., Cui, Y., & Heinecke, A. (2019, 06). Petaflop Seismic Simulations in the Public Cloud. Oral Presentation at ISC High Performance 2019.

- 9099 Velasquez, J. D., Fitzenz, D. D., & Porto, N. B. (2019). Revisiting source modeling in complex tectonic environments for PSHA: A Taiwan case study. Poster Presentation at Seismological Society of America Annual Meeting.
- 9233 NAZARI, N. (2019, 07). How will the risk and losses change by using the newest Uniform California Earthquake Rupture Forecast models in Catastrophe Modeling?. Poster Presentation at 2019 SCEC Annual Meeting.
- 9236 Kowal, A. (2019, 07). Strong Ground Motions Simulations for Dunedin. Poster Presentation at 2019 SCEC Annual Meeting.
- 9235 Neill, S., Lee, R. L., & Bradley, B. A. (2019, 07). Ground motion simulation validation with explicit uncertainty incorporation for small magnitude earthquakes in the Canterbury region. Poster Presentation at 2019 SCEC Annual Meeting.
- 9246 Bradley, B. A., Huang, J., Motha, J., Tarbali, K., Lee, R. L., Bae, S., Polak, V., Zhu, M., Schill, C., Patterson, J., & Lagrava, D. (2019, 07). Cybershake NZ v19.5: New Zealand simulation-based probabilistic seismic hazard analysis. Poster Presentation at 2019 SCEC Annual Meeting.
- 9247 Grzan, D., Rundle, J. B., Wilson, J. M., & Song, T. (2019, 07). Tsunami Squares: Validation by Comparison to the Regional Ocean Modeling System Tsunami Simulator and Earthquake Driven Inundation Mapping. Poster Presentation at 2019 SCEC Annual Meeting.
- 9253 Oral, E., Weng, H., & Ampuero, J. (2019, 07). Does a damaged fault zone mitigate the near-field landslide risk during supershear earthquakes?—Application to the 2018 magnitude 7.5 Palu earthquake. Poster Presentation at 2019 SCEC Annual Meeting.
- 9258 Ariyoshi, K., Ampuero, J., Bürgmann, R., Matsuzawa, T., Hasegawa, A., Hino, R., & Hori, T. (2019, 07). Quantitative relationship between aseismic slip propagation speed and frictional properties. Poster Presentation at 2019 SCEC Annual Meeting.
- 9261 Lee, R. L., Bradley, B. A., Stafford, P. J., Graves, R. W., & Rodriguez-Marek, A. (2019, 07). Hybrid Broadband Ground Motion Simulation Validation of New Zealand Earthquakes with an Updated 3D Velocity Model and Modified Simulation Methodology. Poster Presentation at 2019 SCEC Annual Meeting.
- 9266 Nguyen, T., Lee, R. L., Juarez, A., & Bradley, B. A. (2019, 07). Full Waveform Seismic Tomography for geophysical velocity model in Canterbury region based on the Adjoint-Wavefield method. Poster Presentation at 2019 SCEC Annual Meeting.
- 9271 Ross, Z. E., Trugman, D. T., Azizzadenesheli, K., & Anandkumar, A. (2019, 07). Directivity Modes of Earthquake Populations with Unsupervised Learning. Poster Presentation at 2019 SCEC Annual Meeting.
- 9273 Cheng, Y., Ross, Z. E., Hauksson, E., & Ben-Zion, Y. (2019, 07). A focal mechanism catalog for Southern California derived with deep learning algorithms. Poster Presentation at 2019 SCEC Annual Meeting.
- 9275 Gonzalez-Huizar, H., Chao, K., & Kostoglodov, V. (2019, 07). Earthquake and Tectonic Tremor Dynamically Triggered by the 2017 Mw8.2 Mexico Earthquake. Poster Presentation at 2019 SCEC Annual Meeting.
- 9276 Okuwaki, R., & Yagi, Y. (2019, 07). Slip evolution across geometric barrier during the 2018 Palu Indonesia earthquake. Poster Presentation at 2019 SCEC Annual Meeting.
- 9277 Sleep, N. H., & Liu, T. (2019, 07). Shallow and deep nonlinear attenuation of S waves beneath PS10 during the 2002 Denali mainshock. Poster Presentation at 2019 SCEC Annual Meeting.
- 9280 Hudnut, K. W., Brooks, B. A., Scharer, K. M., Hernandez, J. L., Dawson, T., Oskin, M. E., Arrowsmith, R., Blake, K., Bork, S., Boggs, M., Glennie, C. L., Fernandez-Diaz, J., Singhanian, A., & Hauser, D. L. (2019, 07). Airborne lidar and electro-optical imagery along surface ruptures of the 2019 Ridgecrest earthquake sequence, southern California. Poster Presentation at 2019 SCEC Annual Meeting.

- 9282 Zielke, O., & Mail, P. (2019, 07). MC-QSim -- Introducing a new multi-cycle earthquake rupture simulator. Poster Presentation at 2019 SCEC Annual Meeting.
- 9284 Yin, J., Li, Z., & Denolle, M. A. (2019, 07). Systematic variations of earthquake source time function from clustering analysis. Poster Presentation at 2019 SCEC Annual Meeting.
- 9286 Xu, C., Wen, Z., & Xie, J. (2019, 07). Development of vulnerability surface of high-rise RC frame by means of IDA. Poster Presentation at 2019 SCEC Annual Meeting.
- 9293 Goebel, T. H., Chang, K. W., & Brodsky, E. E. (2019, 07). A mechanism for induced earthquakes at large distances and depths from injection wells. Poster Presentation at 2019 SCEC Annual Meeting.
- 9298 Tang, Y. (2019, 07). A conceptual framework of the China Seismic Experimental Site (CSES). Poster Presentation at 2019 SCEC Annual Meeting.
- 9301 Share, P., Peacock, J., Constable, S., & Vernon, F. L. (2019, 07). Structural Properties of the Southern San Andreas Fault System near Coachella Valley from Magnetotelluric Imaging. Poster Presentation at 2019 SCEC Annual Meeting.
- 9303 Shaddox, H., Schwartz, S. Y., & Bartlow, N. M. (2019, 07). Newly Detected Strain Transient on the Anza Segment of the San Jacinto Fault Zone, Southern California . Poster Presentation at 2019 SCEC Annual Meeting.
- 9306 Sirorattanakul, K., Gualandi, A., & Avouac, J. (2019, 07). Imaging Slow-slip Events in Costa Rica. Poster Presentation at 2019 SCEC Annual Meeting.
- 9308 Wang, H., Liu, M., Duan, B., & Cao, J. (2019, 07). Influence of heterogenous stress on rupture propagation along stepovers of strike-slip faults: Numerical results. Poster Presentation at 2019 SCEC Annual Meeting.
- 9300 Garagash, D. I. (2019, 08). Deeply-sourced fluids upwelling along a fault can control seismogenesis. Poster Presentation at 2019 SCEC Annual Meeting.
- 9313 Shatz, A. C., Pastorino, J., Santa Maria, J. T., Lu, Y., Gugsu, Y. A., Molina, D. E., Savran, W. H., & Jordan, T. H. (2019, 08). Earthquake Forecasting Using Machine Learning Algorithms. Poster Presentation at 2019 SCEC Annual Meeting.
- 9311 Yang, G., Galdamez, J., Addeh, A., O'Neil, B., Waghela, H., Yu, J., Milner, K. R., Swiatlowski, J. L., & Jordan, T. H. (2019, 08). Developing Visualizations of Earthquake Droughts on the San Andreas Fault System. Poster Presentation at 2019 SCEC Annual Meeting.
- 9312 Li Wu, R., Mondragon, G., Tang, T., Davey, L., Carpio, V. Y., Teca, A. F., Lazerson, M. A., Swiatlowski, J. L., Milner, K. R., Callaghan, S., & Jordan, T. H. (2019, 08). 30 Year Forecast for the Current California Earthquake Drought. Poster Presentation at 2019 SCEC Annual Meeting.
- 9314 Duran, S., Agrawal, S., Portillo, H. L., Soto, S., Rico, J. J., Carrillo, E., Noriega, G. R., & Jordan, T. H. (2019, 08). Visualizing Post-Seismic Drought Scenarios: An Analysis of Historical Earthquakes on the San Andreas Fault System. Poster Presentation at 2019 SCEC Annual Meeting.
- 9318 Qin, L., Ben-Zion, Y., Bonilla, L. F., & Steidl, J. H. (2019, 08). Imaging and monitoring temporal changes of shallow seismic velocities at the Garner Valley near Anza, California, following the M7.2 2010 El Mayor-Cucapah earthquake. Poster Presentation at 2019 SCEC Annual Meeting.
- 9321 Williams, C. A., Wallace, L. M., Bartlow, N. M., & Haines, J. (2019, 08). Development of a slow slip catalog for the Hikurangi subduction margin, New Zealand. Poster Presentation at 2019 SCEC Annual Meeting.
- 9322 Bayless, J., Skarlatoudis, A., & Stewart, J. P. (2019, 08). Region-Specific Fourier-Based Site Amplification Modeling. Poster Presentation at 2019 SCEC Annual Meeting.
- 9323 Yang, J. (2019, 08). Locating and monitoring hydraulic fracture and earthquake rupture using elastic reverse-time migration. Poster Presentation at 2019 SCEC Annual Meeting.

- 9324 Wu, Y. (2019, 08). The seasonal variation of the geomagnetic solar daily variation field in China. Poster Presentation at 2019 SCEC Annual Meeting.
- 9315 Zhang, S., & Zhu, H. (2019, 08). Developing a 3-D crustal velocity model for central Oklahoma. Poster Presentation at 2019 SCEC Annual Meeting.
- 9328 Dunham, E. M., Zhu, W., Allison, K. L., & Yang, Y. (2019, 08). Fault Valving and Pore Pressure Evolution in Simulations of Earthquake Sequences and Aseismic Slip. Poster Presentation at 2019 SCEC Annual Meeting.
- 9329 Fuis, G. S. (2019, 08). Subsurface Geometry of the San Andreas Fault in Southern and Central California: A Summary. Poster Presentation at 2019 SCEC Annual Meeting.
- 9330 Chen, B. (2019, 08). A Service System for Seismic Ground Motion Parameters Zonation Map of China based on Smart Terminal and Internet Technique. Poster Presentation at 2019 SCEC Annual Meeting.
- 9333 Catchings, R. D., Goldman, M. R., Chan, J., Allam, A. A., Steidl, J. H., Ben-Zion, Y., Criley, C., Ma, Z., Langermann, D., McEvelly, A. T., & Mongovin, D. D. (2019, 08). Three-Component Nodal Array Aftershock Deployments for the 2019 Ridgecrest Earthquake Sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9336 Pitarka, A., Graves, R. W., Rodgers, A. J., Irikura, K., Miyakoshi, K., & Kawase, H. (2019, 08). Rupture Models and Implication of Rupture Dynamics in Simulated Ground Motion for the 2016 M7 Kumamoto, Japan Earthquake. Poster Presentation at 2019 SCEC Annual Meeting.
- 9334 Alongi, T. V., Brodsky, E. E., Kluesner, J. W., & Brothers, D. S. (2019, 08). Fault Damage Zones in 3D with Active-Source Seismic Data. Poster Presentation at 2019 SCEC Annual Meeting.
- 9342 Matti, J. C., Kendrick, K. J., Yule, D., & Heermance, R. V. (2019, 08). Is the Mission Creek Fault in the San Geronio Pass region of southern California a long-abandoned strand of the San Andreas Fault? Or is it a major player in the San Andreas Fault's late Quaternary strain budget?. Poster Presentation at 2019 SCEC Annual Meeting.
- 9345 Zeng, Y., Petersen, M. D., & Shen, Z. (2019, 08). Spatiotemporal Evolution Pattern of Seismicity across California-Nevada and Its Implication for Future Large Earthquakes. Oral Presentation at 2019 SCEC Annual Meeting.
- 9347 Withers, K. B., Moschetti, M. P., & Thompson, E. M. (2019, 08). A Machine Learning Approach to Developing Ground Motion Models from Simulated Ground Motions. Poster Presentation at 2019 SCEC Annual Meeting.
- 9348 Lozos, J. C., & Harris, R. A. (2019, 08). Preliminary dynamic rupture simulations of the July 2019 M6.4 and M7.1 Ridgecrest, California, earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.
- 9350 Wang, W., Shearer, P. M., & Xu, X. (2019, 08). Spatial decorrelation of tidal triggering and remote triggering at the Coso geothermal field. Poster Presentation at 2019 SCEC Annual Meeting.
- 9358 Shaw, B. E. (2019, 08). Beyond Backslip: Improvement of Earthquake Simulators from New Hybrid Loading Conditions. Poster Presentation at 2019 SCEC Annual Meeting.
- 9360 Park, S., Tsai, V. C., & Ishii, M. (2019, 08). Near-Surface Structure Constrained Using Body-Wave Polarization. Poster Presentation at 2019 SCEC Annual Meeting.
- 9361 Castillo, B. A., McGill, S. F., Scharer, K. M., Yule, D., McPhillips, D., McNeil, J. C., Saha, S., Brown, N. D., & Moon, S. (2019, 08). Ages of Prehistoric Earthquakes on the Banning Strand of the San Andreas Fault, Near North Palm Springs, California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9364 Juarez, A., & Jordan, T. H. (2019, 08). Inversion for the Higher-Degree Moment Tensors of the 2016 Mw 7.8 Kaikōura Earthquake . Poster Presentation at 2019 SCEC Annual Meeting.
- 9365 Castellanos, J. A., Clayton, R. W., & Lai, V. (2019, 08). Seismic Imaging of Southern California with Scattered Waves. Poster Presentation at 2019 SCEC Annual Meeting.

- 9376 Alves da Silva, J., Byrne, H., Plesch, A., Shaw, J. H., & Juanes, R. (2019, 08). Revisiting the classical earthquake experiment in the Rangely oil Field, Colorado, 1970: insights from coupled flow and geomechanical modeling. Poster Presentation at 2019 SCEC Annual Meeting.
- 9381 Rodgers, A. J., Pankajakshan, R., Sjogreen, B., Petersson, A., & Pitarka, A. (2019, 08). Hayward Fault Earthquake Ground Motion Simulations on GPU-Accelerated Platforms with SW4-RAJA. Poster Presentation at 2019 SCEC Annual Meeting.
- 9384 Barbour, A. J., & Farghal, N. S. (2019, 08). Earthquake Magnitudes from Dynamic Strain: Application to the 2019 Ridgecrest Earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.
- 9385 Ahn, D., & Liu, Z. (2019, 08). Mitigation of atmosphere noise in satellite interferometry through machine learning. Poster Presentation at 2019 SCEC Annual Meeting.
- 9383 Chuang, L., Peng, Z., Zhu, L., & McClellan, J. H. (2019, 08). Tremor or train? An attempt to discern tremor and noise using a deep convolutional neural network. Poster Presentation at 2019 SCEC Annual Meeting.
- 9386 Kilb, D., Johnson, C. W., Baltay, A. S., & Vernon, F. L. (2019, 08). On the Variability of Earthquake Ground Motion from the Sage Brush Flats High Density Array in Southern California . Poster Presentation at 2019 SCEC Annual Meeting.
- 9394 Abolfathian, N., Johnson, C. W., & Ben-Zion, Y. (2019, 08). Numerical simulations of stress variations with depth in a model for the San Jacinto fault zone. Poster Presentation at 2019 SCEC Annual Meeting.
- 9401 Milner, K. R., Field, E. H., Savran, W. H., Jordan, T. H., Page, M. T., & Werner, M. J. (2019, 08). Operational earthquake forecasting during the M6.4 Searles Valley and M7.1 Ridgecrest sequence using the UCERF3-ETAS model—evaluation and lessons learned. Poster Presentation at 2019 SCEC Annual Meeting.
- 9403 Muir, J. B., & Zhan, Z. (2019, 08). Visualising the Ridgcrest Earthquakes using Wavefield Reconstruction. Poster Presentation at 2019 SCEC Annual Meeting.
- 9405 Walls, C., Mann, D., Mencin, D. J., Hodgkinson, K., Lawrence, S., Basset, A., Turner, R. C., Feaux, K., & Mattioli, G. S. (2019, 08). NOTA Performance During 2019 Ridgecrest Earthquake Sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9407 Wilson, A., & Ma, S. (2019, 08). Wedge plasticity and coupled simulations of dynamic rupture and tsunami in the Cascadia subduction zone. Poster Presentation at 2019 SCEC Annual Meeting.
- 9409 Ault, A. K., Calzolari, G., Hirth, G., & McDermott, R. (2019, 08). Detecting asperity flash heating on hematite faults from deformation experiments and (U-Th)/He thermochronometry. Poster Presentation at 2019 SCEC Annual Meeting.
- 9408 Onderdonk, N. W., Kerr, D. D., & Figueiredo, P. M. (2019, 08). Using UAV-mounted LiDAR surveys to investigate potential slip rate sites along the northernmost San Jacinto fault zone near its junction with the San Andreas fault in the Cajon Pass area, California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9412 Heimisson, E. R. (2019, 08). Earthquake cycles on a self-similar rough fault: The importance of the minimum roughness wavelength. Poster Presentation at 2019 SCEC Annual Meeting.
- 9414 Bradley, B. A. (2019, 08). Several insights from a decade of earthquake reconnaissance and response in New Zealand. Oral Presentation at 2019 SCEC Annual Meeting.
- 9418 Bello, S., Arrowsmith, R., Scott, C., Lavecchia, G., Scott, T., De Nardis, R., & Ferrarini, F. (2019, 08). The 1983 Borah Peak earthquake (M7.3) (Idaho - USA) - 3D architecture and seismotectonics along the Lost River fault from field observations and high-resolution topography integrated with seismological data . Poster Presentation at 2019 SCEC Annual Meeting.
- 9419 Wen, Z. (2019, 08). Near-Source Strong Ground Motion Characteristics of the 2018 MW 6.4 Hualien Earthquake in Taiwan. Poster Presentation at 2019 SCEC Annual Meeting.

- 9420 Prado, O., Sutkowski, C. S., Hernandez, V., & Polet, J. (2019, 08). Using Ground Penetrating Radar and Magnetic Gradiometry to Detect Archaeological Artifacts from the San Salvador Settlement in Colton, California, buried during the Santa Ana River's Great Flood of 1862. Poster Presentation at 2019 SCEC Annual Meeting.
- 9428 Smith, J. D., Hadrien, M., Avouac, J., White, R. S., & Bourne, S. (2019, 08). Probabilistic forecasting of induced seismicity in the Groningen gas field. Poster Presentation at 2019 SCEC Annual Meeting.
- 9429 Wang, Y., & Day, S. M. (2019, 08). Effects of off-fault inelasticity on near-fault directivity pulses. Poster Presentation at 2019 SCEC Annual Meeting.
- 9423 Steinhardt, W., & Rubinstein, S. (2019, 08). Experimental Investigation of the Origins of Brittle Fracture Roughness. Poster Presentation at 2019 SCEC Annual Meeting.
- 9431 Clayton, R. W., Kohler, M. D., Guy, R., Bunn, J., Heaton, T. H., & Chandy, K. (2019, 08). CSN/LAUSD Network: A Dense Accelerometer Network in Los Angeles Schools. Poster Presentation at 2019 SCEC Annual Meeting.
- 9432 Cochran, E. S., Kilb, D., Bunn, J., Minson, S. E., Baltay, A. S., Hoshiba, M., & Kodera, Y. (2019, 08). Retrospective and real-time event-based performance of the PLUM earthquake early warning algorithm for the West Coast, USA. Poster Presentation at 2019 SCEC Annual Meeting.
- 9433 Khoshmanesh, M., Shirzaei, M., & Uchida, N. (2019, 08). Deep slow-slip events promote seismicity in northeastern Japan subduction zone. Poster Presentation at 2019 SCEC Annual Meeting.
- 9426 De Pascale, G. P., Sandoval, F., Perroud, S., Persico, M., & Villalobos, A. (2019, 08). First Geologic Slip Rates Along Patagonia's Fastest Slipping Crustal Faults. Poster Presentation at 2019 SCEC Annual Meeting.
- 9437 Luo, Y., & Liu, Z. (2019, 08). Slip transient pattern changes: external perturbation or intrinsic interaction with earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.
- 9438 Parker, J. W., Heflin, M. B., & Donnellan, A. (2019, 08). Tools for GNSS application to tectonics. Poster Presentation at 2019 SCEC Annual Meeting.
- 9442 Ma, S., Withers, K. B., Ampuero, J., Dalguer, L. A., Wang, Y., & Goulet, C. A. (2019, 08). Validation of Broadband Ground Motion from Dynamic Rupture Simulations: towards better characterizing seismic hazard for engineering applications. Poster Presentation at 2019 SCEC Annual Meeting.
- 9444 Maneerat, P., Dreger, D. S., & Bürgmann, R. (2019, 08). Intra-slab stress field and waveform modeling to determine velocity structure of the Indoburman Range. Poster Presentation at 2019 SCEC Annual Meeting.
- 9448 Rubinstein, J. L., Norbeck, J. H., & Barbour, A. J. (2019, 08). Forecasts of Induced Seismicity and its Hazard from a Hydromechanical Earthquake Nucleation Model . Poster Presentation at 2019 SCEC Annual Meeting.
- 9450 Reed, M. P., Burgette, R. J., Scharer, K. M., Lifton, N., & McPhillips, D. (2019, 08). Assessment of Slip and Deformation Along the Santa Susana Fault, Southern California, Using High Resolution Topography. Poster Presentation at 2019 SCEC Annual Meeting.
- 9451 Fildes, R. A., Turcotte, D. L., & Rundle, J. B. (2019, 08). Natural time analysis of quasi-periodic caldera collapse events during the 2018 Kīlauea volcano eruptive sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9452 Kroll, K. A., Richards-Dinger, K. B., White, J., & Dieterich, J. H. (2019, 08). Parametric Estimation of the Local Stress Field in Southern Kansas. Poster Presentation at 2019 SCEC Annual Meeting.
- 9454 Penney, C., & Avouac, J. (2019, 08). Rheological implications of post-seismic deformation following the 2019 Ridgecrest Earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.

- 9458 Parker, G. A., Baltay, A. S., Thompson, E. M., Rekoske, J., & McNamara, D. (2019, 08). Source, Site and Path Characterization of the July 2019 M7.1 and M6.4 Ridgecrest Earthquake Sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9459 Qiu, H., Allam, A. A., Lin, F., & Ben-Zion, Y. (2019, 08). Damage Zone Resonance: Observation and Analytical Fitting of Fault Zone Trapped Wave Normal Modes Using Large-N Near-fault Seismic Arrays. Poster Presentation at 2019 SCEC Annual Meeting.
- 9463 Retailleau, L., Mordret, A., & Beroza, G. C. (2019, 08). Tomography of Central California Using Ambient Field Correlations. Poster Presentation at 2019 SCEC Annual Meeting.
- 9462 Guns, K. A., & Bennett, R. A. (2019, 08). Detecting and Reducing the Effects of Postseismic Deformation in Observed GPS Time Series Using a Hybrid Forward/Inverse Method in Southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9461 Flores, P. A., & Polet, J. (2019, 08). Using Ground-based Magnetics and VLF Surveying to Characterize Potential Fault Zones Near Bonanza Springs, California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9465 Kain, J. O., Persaud, P., & Stock, J. M. (2019, 08). Horizontal Principal Stress Orientations Near Long Beach, California from Borehole Breakouts. Poster Presentation at 2019 SCEC Annual Meeting.
- 9467 Hardebeck, J. L., Michael, A. J., Page, M. T., van der Elst, N. J., Barall, M., Llenos, A. L., Martinez, E. M., & McBride, S. K. (2019, 08). Aftershock forecasts following the M6.4 and M7.1 Ridgecrest, California, earthquakes of July 2019. Poster Presentation at 2019 SCEC Annual Meeting.
- 9464 Gualandi, A., & Liu, Z. (2019, 08). Variational Bayesian Independent Component Analysis for InSAR displacement time series with application to Central Valley, California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9470 Bonilla, L. F., & Ben-Zion, Y. (2019, 08). Detailed space-time variations of shallow seismic velocities at the San Jacinto fault zone based on autocorrelation analysis of dense array data. Poster Presentation at 2019 SCEC Annual Meeting.
- 9471 Nakata, N., Fang, H., White, M. C., & Pitarka, A. (2019, 08). Shallow crustal heterogeneity in Southern California estimated from earthquake coda waves. Poster Presentation at 2019 SCEC Annual Meeting.
- 9476 Clements, T., & Denolle, M. A. (2019, 08). Cactus to Clouds: Processing the SCEDC Open Data Set on AWS. Poster Presentation at 2019 SCEC Annual Meeting.
- 9487 Yu, E., Acharya, P., Bhaskaran, A., Chen, S., Andrews, J. R., Thomas, V., Ross, Z. E., Hauksson, E., & Clayton, R. W. (2019, 08). Cloud Computing and Big Data – Using the Southern California Earthquake Data Center (SCEDC) and the Southern California Seismic Network (SCSN) Products and Services for Earthquake Research. Poster Presentation at 2019 SCEC Annual Meeting.
- 9488 Okamoto, K. K., Savage, H. M., Keranen, K. M., & Carpenter, B. M. (2019, 08). The role of lithology in fault re-strengthening: A case study of the 2011 Prague, Oklahoma induced earthquake sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9490 Thakur, P., & Huang, Y. (2019, 08). Stress Heterogeneity and Slip Complexity due to Fault Zone Damage in Fully Dynamic Earthquake Cycles. Poster Presentation at 2019 SCEC Annual Meeting.
- 9492 Saylor, C. (2019, 08). Estimating Fault Configurations From InSAR Data. Poster Presentation at 2019 SCEC Annual Meeting.
- 9493 Kelty, C., Onderdonk, N., Behl, R., & Garcia, A. (2019, 08). Differential uplift of fluvial and marine terraces across the Santa Ynez River fault, Santa Barbara County, California . Poster Presentation at 2019 SCEC Annual Meeting.
- 9496 Klimasewski, A., Sahakian, V. J., & Thomas, A. M. (2019, 08). Comparing artificial neural networks with traditional ground-motion models for small magnitude earthquakes in Southern California. Poster Presentation at 2019 SCEC Annual Meeting.

- 9498 Rockwell, T. K., Klinger, Y., Jerrett, A., Wessel, K., Singleton, D. M., Levy, Y., & Okumura, K. (2019, 08). Cone penetrometer tests, continuous cores and paleoseismic trenching combined to infer a high mid-Holocene slip rate for the Imperial Fault, California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9479 Don, J., Plesch, A., Newman, M. M., & Shaw, J. H. (2019, 08). Linkage of the Ventura-Pitas Point and Mid-Channel faults and its implications for large, multi-segment earthquakes . Poster Presentation at 2019 SCEC Annual Meeting.
- 9502 Williams, E. F., Zhan, Z., Li, Z., Karrenbach, M., Coleman, T., LaFlame, L., Cole, S., & Yarsev, V. (2019, 08). Aftershocks of the Ridgecrest earthquake sequence on four dense fiber seismic arrays. Poster Presentation at 2019 SCEC Annual Meeting.
- 9506 Trugman, D. T., Ross, Z. E., & Johnson, P. A. (2019, 08). Anti-similar aftershocks in the Ridgecrest, California earthquake sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9509 Nicholson, C., Plesch, A., Sorlien, C. C., Shaw, J. H., Marshall, S. T., & Hauksson, E. (2019, 08). Continued Updates, Expansion and Improvements to the Community Fault Model (CFM version 5.3). Poster Presentation at 2019 SCEC Annual Meeting.
- 9511 Page, M. T., Field, E. H., Milner, K. R., & van der Elst, N. J. (2019, 08). Explaining the paleo-event hiatus in California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9514 Rodriguez Padilla, A., Oskin, M. E., Rockwell, T. K., Delusina, I., & Singleton, D. M. (2019, 08). Paleoseismic investigation and mechanical modeling of rupture behavior through Cajon Pass . Poster Presentation at 2019 SCEC Annual Meeting.
- 9503 Aati, S., & Avouac, J. (2019, 08). Surface deformation of the Mw 6.4 and Mw 7.1 Ridgecrest earthquakes measured from subpixel correlation of Copernicus Sentinel-2 optical images . Poster Presentation at 2019 SCEC Annual Meeting.
- 9515 Civilini, F., Mooney, W. D., & Zahran, H. M. (2019, 08). Ambient noise tomography of the Saudi Arabian Shield. Poster Presentation at 2019 SCEC Annual Meeting.
- 9518 Helgans, E. C., Luttrell, K. M., Smith-Konter, B. R., & Burkhard, L. (2019, 08). Multicomponent Model of Crustal Stress at Cajon Pass, Southern California with Implications for Stress Field Heterogeneity. Poster Presentation at 2019 SCEC Annual Meeting.
- 9517 Tymofyeyeva, E., & Fialko, Y. (2019, 08). Complementing CGM with surface deformation measurements from dense catalogs of SAR data. Poster Presentation at 2019 SCEC Annual Meeting.
- 9519 Rousset, B., Fu, Y., Bartlow, N. M., & Bürgmann, R. (2019, 08). Episodic tremor and slip dynamics in south-central Alaska. Poster Presentation at 2019 SCEC Annual Meeting.
- 9521 Blisniuk, K. D., Balco, G., Fosdick, J. C., & Waco, J. N. (2019, 08). Evidence for an alternative position for the primary active strand of the San Andreas Fault along its restraining bend in southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9523 Llenos, A. L., Michael, A. J., Moschetti, M. P., Mueller, C. S., Petersen, M. D., & Shumway, A. M. (2019, 08). Assessing declustering methods in Hawaii for probabilistic seismic hazard assessment. Poster Presentation at 2019 SCEC Annual Meeting.
- 9526 Im, K., & Avouac, J. (2019, 08). Thermally Induced Deformation and Seismicity. Poster Presentation at 2019 SCEC Annual Meeting.
- 9525 Sudhir, K., & Lapusta, N. (2019, 08). Realistic variability in seismic moment and recurrence time of repeating earthquakes reproduced in models with fractal shapes of fault patches . Poster Presentation at 2019 SCEC Annual Meeting.
- 9531 Reitman, N. G., Mueller, K. J., Tucker, G., Gold, R. D., Briggs, R., & Barnhart, K. (2019, 08). Offset channels are incomplete records of strike-slip fault displacement. Poster Presentation at 2019 SCEC Annual Meeting.

- 9534 Chapman, A. D., Schneider, E., & Lockner, D. A. (2019, 08). Refining estimates of the seismic properties and geologic framework of the Mojave Desert, southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9535 Saha, S., Moon, S., Brown, N. D., Rhodes, E. J., McGill, S. F., Castillo, B. A., Scharer, K. M., McPhillips, D., & Yule, D. (2019, 08). Influence of sediment dynamics and alluvial fan formation on paleoseismic studies in southern California, North America. Poster Presentation at 2019 SCEC Annual Meeting.
- 9537 Esmaeilzadeh Seylabi, E., Restrepo, D., Asimaki, D., & Taborda, R. (2019, 08). Modeling shallow crustal nonlinearity in physics-based earthquake simulations: Beyond perfect plasticity. Poster Presentation at 2019 SCEC Annual Meeting.
- 9539 Li, Y., Su, J., Chen, T., Wu, P., De Pascale, G. P., Quigley, M., & Gravely, D. (2019, 08). Structural Relationship between Rupture Zones in a Sequence of Earthquakes Viewed by Fault-Zone Trapped Waves . Poster Presentation at 2019 SCEC Annual Meeting.
- 9545 Zhan, Z., & Wang, X. (2019, 08). Automated moment tensor inversion using 3D Green's Functions: Application to the LA basin and the 2019 Ridgecrest sequence . Poster Presentation at 2019 SCEC Annual Meeting.
- 9546 Yao, L., Ma, S., & Shimamoto, T. (2019, 08). Evidence of thermal pressurization in high-velocity friction experiments on dolerite under elevated pore pressure. Poster Presentation at 2019 SCEC Annual Meeting.
- 9552 Okumura, K., Malik, J. N., Pokhrel, P., & Sapkota, S. N. (2019, 08). Paleoseismology of the largest earthquakes from the Himalayan front. Poster Presentation at 2019 SCEC Annual Meeting.
- 9554 Wittich, C., & Saifullah, M. (2019, 08). Case Study Evaluation of the Interface Geometry on Fragility of Precarious Rock Systems. Poster Presentation at 2019 SCEC Annual Meeting.
- 9555 Ward, L., Smith-Konter, B. R., Xu, X., & Sandwell, D. T. (2019, 08). Vertical Deformation Dependency on Spatially Variable Elastic Plate Thickness. Poster Presentation at 2019 SCEC Annual Meeting.
- 9557 Zinke, R., Hollingsworth, J., Peltzer, G., Fielding, E. J., Dolan, J. F., Milliner, C., Bozorgnia, Y., & Sarmiento, A. (2019, 08). Three-dimensional rupture patterns of the 2019 Ridgecrest, California earthquake sequence revealed by correlation of high-resolution WorldView optical satellite imagery . Poster Presentation at 2019 SCEC Annual Meeting.
- 9559 Persaud, P., Clayton, R. W., Denolle, M. A., & Polet, J. (2019, 08). Field Volunteers for the Los Angeles BASIN Seismic Experiment – Phase IV. Poster Presentation at 2019 SCEC Annual Meeting.
- 9558 Hu, J., Qiu, H., Share, P., Qian, J., Zhang, H., & Ben-Zion, Y. (2019, 08). Time-dependent earthquake tomography in Southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9540 Feng, T., Meng, L., & Huang, H. (2019, 08). Detecting offshore earthquakes with backprojection and matched-filter method. Poster Presentation at 2019 SCEC Annual Meeting.
- 9563 Savage, H. M., Coffey, G. L., Polissar, P. J., Hemming, S., Cox, S., Winckler, G., & Bradbury, K. K. (2019, 08). Coupling biomarker thermal maturity with K-Ar dating to assess the earthquake slip history of the central San Andreas fault. Poster Presentation at 2019 SCEC Annual Meeting.
- 9560 Elliott, A. J., Walker, R. T., Parsons, B. E., Kulikova, G., Grützner, C., Abdrakhmatov, K., Zhang, Z., & Ren, Z. (2019, 08). Complex ruptures in the historical record, illuminated by photogrammetric topography and analog seismograms. Poster Presentation at 2019 SCEC Annual Meeting.
- 9562 Barall, M., Michael, A. J., & Hardebeck, J. L. (2019, 08). The USGS Automatic Aftershock Forecasting System. Poster Presentation at 2019 SCEC Annual Meeting.
- 9564 Johnson, C. W., Ben-Zion, Y., Meng, H., & Vernon, F. L. (2019, 08). Classifying emergent and impulsive signals in continuous seismic waveforms. Poster Presentation at 2019 SCEC Annual Meeting.

- 9566 Tyagi, A. D., Gurley, S., Grenier, M., Kreuziger, R., & Polet, J. (2019, 08). Site Response Across the San Gabriel, Chino and San Bernardino Sedimentary Basins from Application of the Spectral Ratio Method to Ambient Noise Recorded by Seismic Node Transects. Poster Presentation at 2019 SCEC Annual Meeting.
- 9567 Badt, N. Z., Tullis, T. E., & Hirth, G. (2019, 08). Thermal pressurization in experimental faults. Poster Presentation at 2019 SCEC Annual Meeting.
- 9568 Abdelmeguid, M., Ma, X., & Elbanna, A. E. (2019, 08). Modeling sequence of earthquakes and aseismic slip (SEAS) in low-velocity faults zones using a computationally efficient numerical algorithm. Poster Presentation at 2019 SCEC Annual Meeting.
- 9556 Bemis, S. P., Scharer, K. M., & Dolan, J. F. (2019, 08). Barriers to rupture propagation may be different beneath the surface: Insights from the Elizabeth Lake paleoseismic record. Poster Presentation at 2019 SCEC Annual Meeting.
- 9569 Petrashek, S. R., Pulver, N. W., Contreras, R., Faherty, D., & Polet, J. (2019, 08). Using Ground-based Magnetics, VLF, and DC Resistivity to Examine Faulting at the San Andreas Oasis, Dos Palmas Preserve. Poster Presentation at 2019 SCEC Annual Meeting.
- 9570 Griffith, W. A., Smith, Z. D., Braunagel, M., Marren, T., & Larocque, S. (2019, 08). Inelastic off-fault deformation and pulverization in the lab: Tensile fragmentation of crystalline vs. granular sedimentary rocks in response to isotropic tension. Poster Presentation at 2019 SCEC Annual Meeting.
- 9565 Li, Y., Clayton, R. W., & Jia, Z. (2019, 08). S wave velocity model from ambient-noise surface-wave tomography in the San Gabriel and San Bernardino Basins. Poster Presentation at 2019 SCEC Annual Meeting.
- 9573 Schaal, N., Lapusta, N., & Lin, Y. (2019, 08). Comparing seismological interpretations of different source types produced in a rate-and-state fault model. Poster Presentation at 2019 SCEC Annual Meeting.
- 9575 Yang, Z., & Denolle, M. A. (2019, 08). Spatial and temporal evolution of seismicity, seismic velocity, and pore pressure in the Guy-Greenbrier, Arkansas, earthquake sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9576 Savran, W. H., Werner, M. J., Rhoades, D. A., Jackson, D. D., Field, E. H., Milner, K. R., Michael, A. J., Jordan, T. H., & Maechling, P. J. (2019, 08). Pseudo-Prospective Evaluation of Operational UCERF3-ETAS Forecasts during the Ridgecrest, California, Earthquake Sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9571 McGregor, I., & Onderdonk, N. W. (2019, 08). Late Pleistocene rates of folding and faulting in the western Transverse Ranges, California, from reconstruction and luminescence dating of the late Pleistocene Orcutt formation . Poster Presentation at 2019 SCEC Annual Meeting.
- 9577 Ajala, R., Persaud, P., Juarez, A., & Ayeni, G. (2019, 08). Evaluating seismic velocity models in the Salton Trough, Southern California using spectral-element wave simulation of validation events. Poster Presentation at 2019 SCEC Annual Meeting.
- 9579 Materna, K., Bartlow, N. M., Wech, A., Williams, C. A., & Bürgmann, R. (2019, 08). Dynamically Triggered Changes in Interface Coupling in Southern Cascadia. Poster Presentation at 2019 SCEC Annual Meeting.
- 9578 Li, J., Schaal, N., & Lui, S. (2019, 08). Exploring the effect of timing on the source properties of intershocks produced at asperities in a rate-and-state fault model. Poster Presentation at 2019 SCEC Annual Meeting.
- 9587 Pierce, I., Williams, A. M., Koehler, R. D., Akciz, S. O., Chupik, C., & Bormann, J. M. (2019, 08). Detailed fracture map and orthophoto of the southern portion of the M7.1 2019 Ridgecrest Earthquake . Poster Presentation at 2019 SCEC Annual Meeting.
- 9583 Okubo, K., Bhat, H. S., Rougier, E., & Denolle, M. A. (2019, 08). Towards identifying its seismic observables in models of coseismic off-fault damage. Poster Presentation at 2019 SCEC Annual Meeting.

- 9585 Bryan, J. T., Okubo, K., Yuan, C., & Denolle, M. A. (2019, 08). Improving the resolution of co-seismic velocity change monitoring at active fault zones using the ambient seismic field. Poster Presentation at 2019 SCEC Annual Meeting.
- 9588 Dascher-Cousineau, K., Brodsky, E. E., Finnegan, N., & Duvall, A. R. (2019, 08). Large Scale Detection of Fault Damage. Poster Presentation at 2019 SCEC Annual Meeting.
- 9589 Wu, Q., Chen, X., & Abercrombie, R. E. (2019, 08). Characterizing earthquake source complexity in the trifurcation area of the San Jacinto fault zone. Poster Presentation at 2019 SCEC Annual Meeting.
- 9590 Levy, Y., Marshall, S. T., Rockwell, T. K., & Shaw, J. H. (2019, 08). Testing Structural Model Predictions Against Geodetic Data in the Western Transverse Ranges, Southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9594 Elston, H. M., Cooke, M. L., Marshall, S. T., & Hatch, J. L. (2019, 08). Sensitivity of regional interseismic deformation to variations in active fault configuration of the southern San Andreas fault and San Jacinto faults . Poster Presentation at 2019 SCEC Annual Meeting.
- 9597 Meng, X., Goulet, C. A., Milner, K. R., & Callaghan, S. (2019, 08). Fully Nonergodic Ground Motion Models in Central California Using NGA-West2 and SCEC CyberShake Datasets. Poster Presentation at 2019 SCEC Annual Meeting.
- 9598 Gupta, A., MacDonald, T., & Weiser, D. (2019, 08). Applications of and considerations for using machine learning and deep learning tools in earthquake engineering, with focus on soft story building identification. Poster Presentation at 2019 SCEC Annual Meeting.
- 9600 Murray, J. R., & Svarc, J. (2019, 08). Mitigating the Effect of the Ridgecrest Earthquakes on the USGS's Automated Analysis of Global Positioning System Data. Poster Presentation at 2019 SCEC Annual Meeting.
- 9605 Aagaard, B. T., Minson, S. E., Baltay, A. S., Cochran, E. S., & Hanks, T. C. (2019, 08). ShakeAlert Earthquake Early Warning Performance for the 2019 Ridgecrest Sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9604 Wang, K., Zhu, W., Ellsworth, W. L., & Beroza, G. C. (2019, 08). Earthquake Detection in Develocorder Films: An Image-based Detection Neural Network for Analog Seismograms. Poster Presentation at 2019 SCEC Annual Meeting.
- 9611 Saunders, J. K., Aagaard, B. T., Baltay, A. S., & Minson, S. E. (2019, 08). Implications of uncertainty in ground motion estimates on ShakeAlert alerting strategies: Considering the 2019 Ridgecrest earthquake sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9603 Castro, R. R., Share, P., Vidal-Villegas, A., Mendoza, L., & Ben-Zion, Y. (2019, 08). High resolution imaging of the San Andreas Fault System in Baja California, Mexico using triple-difference tomography. Poster Presentation at 2019 SCEC Annual Meeting.
- 9607 Chung, A. I., Smith, D. E., Andrews, J. R., Böse, M., McGuire, J. J., Meier, M., Stubailo, I., & Allen, R. M. (2019, 08). Performance of the ShakeAlert Earthquake Early Warning System During the Ridgecrest Sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9612 Yi, Z., & Burton, H. (2019, 08). Machine Learning Based Regional Seismic Retrofit Design Optimization for Soft Weak Open Front Wall Line Buildings. Poster Presentation at 2019 SCEC Annual Meeting.
- 9617 Roten, D., Olsen, K. B., Day, S. M., & Cui, Y. (2019, 08). An Iwan-type Plasticity Model for 3D Simulations of San Andreas Scenario Earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.
- 9613 Hough, S. E., & The Ridgecrest Response Team, .. (2019, 08). What the "L"? Unraveling (and Responding to) the 2019 Ridgecrest, California, Earthquake Sequence. Oral Presentation at 2019 SCEC Annual Meeting.
- 9618 Erickson, B. A., Jiang, J., Barall, M., Lapusta, N., Dunham, E. M., Harris, R. A., Abrahams, L. S., Allison, K. L., Ampuero, J., Barbot, S. D., Cattania, C., Elbanna, A. E., Fialko, Y., Idini, B., Kozdon, J. E., Lambert, V. R., Liu, Y., Luo, Y., Ma, X., Best Mckay, M., Segall, P., Shi, P., van den Ende, M., & Wei, M.

- (2019, 08). The Community Code Verification Exercise for Simulating Sequences of Earthquakes and Aseismic Slip (SEAS). Poster Presentation at 2019 SCEC Annual Meeting.
- 9622 Dal Zilio, L., Lapusta, N., & Avouac, J. (2019, 08). Exploring slow slip events and their scaling in 3D simulations of fault slip. Poster Presentation at 2019 SCEC Annual Meeting.
- 9627 Fan, W., Barbour, A. J., & Cochran, E. S. (2019, 08). Teleseismic dynamic triggering of microearthquakes in the Anza area, California: the role of dynamic strain and pore pressure. Poster Presentation at 2019 SCEC Annual Meeting.
- 9628 Hu, Z., Roten, D., Olsen, K. B., & Day, S. M. (2019, 08). Modeling of Empirical Transfer Functions including 3D Velocity Structure. Poster Presentation at 2019 SCEC Annual Meeting.
- 9629 Shearer, P. M., Abercrombie, R. E., & Wang, W. (2019, 08). How to Measure Variations in High-Frequency Radiation for Small to Moderate Earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.
- 9632 Eymold, W. K., & Jordan, T. H. (2019, 08). Tectonic regionalization of the Southern California crust from tomographic cluster analysis. Poster Presentation at 2019 SCEC Annual Meeting.
- 9635 Scott, C. P., & Shirzaei, M. (2019, 08). Imaging a decade of creep along the San Andreas Fault from UAVSAR: Initial Results. Poster Presentation at 2019 SCEC Annual Meeting.
- 9633 Stephenson, O., Koehne, T., Zhan, E., Cahill, B., Ross, Z. E., & Yun, S. (2019, 08). Deep Learning-based Damage Mapping with InSAR Coherence Time Series. Poster Presentation at 2019 SCEC Annual Meeting.
- 9637 Xu, X., Ward, L. A., Smith-Konter, B. R., Milliner, C., Fang, P., Bock, Y., & Sandwell, D. T. (2019, 08). Surface rupturing and triggered slip on nearby faults from the Ridgecrest earthquakes revealed by InSAR . Poster Presentation at 2019 SCEC Annual Meeting.
- 9630 Kerr, D. D., Onderdonk, N. W., & Figueiredo, P. M. (2019, 08). Late Quaternary deformation and recency of faulting of the northernmost San Jacinto fault zone, and implications for slip transfer to San Andreas fault. Poster Presentation at 2019 SCEC Annual Meeting.
- 9641 Zaliapin, I., & Ben-Zion, Y. (2019, 08). Quantifying preparation process of large earthquakes: Damage localization and coalescent dynamics. Poster Presentation at 2019 SCEC Annual Meeting.
- 9642 King, T., Quigley, M. C., & Clark, D. (2019, 08). Bedrock structural controls on the propagation of multi-fault earthquake ruptures and their environmental effects. Poster Presentation at 2019 SCEC Annual Meeting.
- 9643 Wang, N., Takedatsu, R., Olsen, K. B., & Day, S. M. (2019, 08). Inclusion of Frequency-Dependent Spatial Correlation into the SDSU Broadband Ground-Motion Generation Method. Poster Presentation at 2019 SCEC Annual Meeting.
- 9645 Yue, P. (2019, 08). Inter-event slow-slip process for the fore- to Main triggering of the 2016 Komamoto earthquake sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9649 Figueiredo, P. M., Weldon, R. J., Owen, L. A., & Onderdonk, N. W. (2019, 08). Preliminary Geochronology data for Cajon Pass Terraces- implications to the regional chronosequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9651 Park, Y., Mousavi, M., Zhu, W., Ellsworth, W. L., & Beroza, G. C. (2019, 08). The Guy-Greenbrier seismic sequence revisited with deep learning. Poster Presentation at 2019 SCEC Annual Meeting.
- 9654 Lee, J., Chung, Y., Lee, K., & Shin, C. (2019, 08). Broadband Ground-Motion Simulation for the Korean Peninsula. Poster Presentation at 2019 SCEC Annual Meeting.
- 9657 Zhong, H. C. (2019, 08). The Holocene paleoearthquakes on the 2014 Kangding Ms6.3 earthquake faults. Poster Presentation at 2019 SCEC Annual Meeting.
- 9659 Jian, T. Q. (2019, 08). Seismogenic structure of the 2017 Ms6.9 Milin earthquake in Tibet. Poster Presentation at 2019 SCEC Annual Meeting.

- 9660 Taira, T., Kaven, J., Rubinstein, J. L., & Cochran, E. S. (2019, 08). Search for seismic velocity changes associated with CO₂ injections at the carbon capture and storage site in Decatur, Illinois. Poster Presentation at 2019 SCEC Annual Meeting.
- 9665 Carlson, G., Shirzaei, M., Werth, S., Zhai, G., & Ojha, C. (2019, 08). Groundwater Unloading in the Central Valley Modifies Crustal Stress. Poster Presentation at 2019 SCEC Annual Meeting.
- 9666 Lambert, V. R., & Lapusta, N. (2019, 08). Modeling the low-stress, low-heat operation of mature faults. Poster Presentation at 2019 SCEC Annual Meeting.
- 9667 Yeh, T., & Olsen, K. B. (2019, 08). Numerical accuracy of staircase fluid-solid and free-surface boundary conditions for staggered-grid finite-differences. Poster Presentation at 2019 SCEC Annual Meeting.
- 9670 Macy, K. P., & Polet, J. (2019, 08). Investigation of the Yorba Linda Trend using earthquake relocation based on waveform cross-correlation. Poster Presentation at 2019 SCEC Annual Meeting.
- 9671 Ulloa, S., & Lozos, J. C. (2019, 08). Surface Displacement and Ground Motion from Dynamic Rupture Models of Thrust Faults with Variable Dip Angles and Burial Depths. Poster Presentation at 2019 SCEC Annual Meeting.
- 9674 Xie, Y., & Meng, L. (2019, 08). Imaging the rupture process of the 2019 M6.4 and M7.1 Ridgecrest Earthquakes using local seismic stations in Southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9672 Sheng, S., Wan, Y., Jiang, C., Wang, X., Liang, S., & Hu, X. (2019, 08). Study on the crustal stress field of the Tengchong volcanic area. Poster Presentation at 2019 SCEC Annual Meeting.
- 9684 Tal, Y., Rubino, V., Rosakis, A. J., & Lapusta, N. (2019, 08). Evolution of frictional shear resistance in response to rapid variations of normal stress. Poster Presentation at 2019 SCEC Annual Meeting.
- 9683 Jin, Z., & Fialko, Y. (2019, 08). Rupture models of the 2019 M6.4-7.1 Ridgecrest earthquakes constrained by space geodetic data and aftershock locations. Poster Presentation at 2019 SCEC Annual Meeting.
- 9686 Jia, Z., & Clayton, R. W. (2019, 08). Shallow velocity structure of Los Angeles Basin from ambient noise tomography with dense seismic arrays. Poster Presentation at 2019 SCEC Annual Meeting.
- 9687 Li, Y., & Bürgmann, R. (2019, 08). Characterizing creeping faults using InSAR: a case study of the Xianshuihe Fault. Poster Presentation at 2019 SCEC Annual Meeting.
- 9689 Mancini, S., Segou, M., Parsons, T., & Werner, M. J. (2019, 08). Prospective and Pseudo-prospective Aftershock Forecasts After the July 2019 M6.4 Searles Valley and M7.1 Ridgecrest Earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.
- 9690 Liu, D., & Duan, B. (2019, 08). Multi-cycle Dynamics of the San Andreas and San Jacinto Faults in Southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9691 Bradley, K., Shafiqah Binti Mohammad Fadil, W., & Wei, S. (2019, 08). Slip partitioning and plate kinematic barriers to megathrust rupture. Poster Presentation at 2019 SCEC Annual Meeting.
- 9692 Bayona Viveros, J. A., von Specht, S., Strader, A. E., Hainzl, S., Cotton, F., & Schorlemmer, D. (2019, 08). A regionalized seismicity model for subduction zones based on geodetic strain rates, geomechanical parameters and earthquake-catalog data. Poster Presentation at 2019 SCEC Annual Meeting.
- 9698 Cui, Y., Breuer, A. N., & Lenz, D. (2019, 08). Continued Integration and Delivery for AWP-ODC-OS in the public Cloud. Poster Presentation at 2019 SCEC Annual Meeting.
- 9700 Sana, H., Taborik, P., Bhat, F., Flašar, J., & Stepancikova, P. (2019, 08). Detecting active faults in intramountain basins using Electric Resistivity Tomography . Poster Presentation at 2019 SCEC Annual Meeting.

- 9701 Brenguier, F., Boué, P., Ben-Zion, Y., Vernon, F. L., Johnson, C. W., Mordret, A., Coutant, O., Share, P., Beaucé, E., Hollis, D. D., & Lecocq, T. (2019, 08). Train traffic as a powerful noise source for monitoring active faults with seismic interferometry. Poster Presentation at 2019 SCEC Annual Meeting.
- 9702 Izquierdo, K. D., Montesi, L. G., Holt, W. E., Bahadori, A., & Shinevar, W. (2019, 08). How certain are regional strength envelopes in Southern California?. Poster Presentation at 2019 SCEC Annual Meeting.
- 9706 Plesch, A., Shaw, J. H., Oskin, M. E., & Maechling, P. J. (2019, 08). A volumetric, CFM compatible, Geologic Framework Model (GFM) . Poster Presentation at 2019 SCEC Annual Meeting.
- 9710 Si, H., Koketsu, K., & Miyake, H. (2019, 08). Preliminary study on the attenuation characteristics of ground motion recorded during the 2019 Ridgecrest earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.
- 9708 Shen, Z., Yue, H., Sun, J., Wang, M., Xue, L., Lu, W., Zhou, Y., Ren, C., & Li, M. (2019, 08). Distinct Dual-mode inter-event slip and cascade triggering during the 2019 Ridgecrest, California foreshock/mainshock earthquake sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9712 Scott, T. R., Chen, Z., Scott, C. P., Das, J., & Arrowsmith, R. (2019, 08). Rock Traits from Machine Learning: applications to precariously balanced rocks and fault scarps in Southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9711 Zhang, Y., Wu, Z., Zhang, X., Yu, H., Zhang, S., Zhang, X., Yu, C., & Hu, C. (2019, 08). CSEP2 from China Perspective. Poster Presentation at 2019 SCEC Annual Meeting.
- 9713 Sun, L. (2019, 08). Seismicity in Changning Sichuan, China. Poster Presentation at 2019 SCEC Annual Meeting.
- 9714 Sandwell, D. T., Xu, X., Klein, E., Fang, P., & Bock, Y. (2019, 08). Contribution to the Community Geodetic Model: Line-of-Sight Deformation Time-series along the San Andreas Fault System from Sentinel-1 InSAR and GPS. Poster Presentation at 2019 SCEC Annual Meeting.
- 9718 Ji, C., Archuleta, R. J., Tsuda, K., & Condon, S. J. (2019, 08). Preliminary seismological analyses of 2019 Mw 6.4 Searles Valley and Mw 7.1 Ridgecrest California earthquakes . Poster Presentation at 2019 SCEC Annual Meeting.
- 9720 Schulte-Pelkum, V., Ball, J., Becker, T. W., Porritt, R., & Behr, W. M. (2019, 08). Analysis and removal of sediment signal in receiver functions. Poster Presentation at 2019 SCEC Annual Meeting.
- 9717 Callaghan, S., Maechling, P. J., Goulet, C. A., Milner, K. R., Su, M., Graves, R. W., Olsen, K. B., Cui, Y., Aagaard, B. T., Wooddell, K. E., Kottke, A. R., Shaw, B. E., & Jordan, T. H. (2019, 08). New Advances in CyberShake PSHA Models. Poster Presentation at 2019 SCEC Annual Meeting.
- 9723 Huang, H., Bürgmann, R., Meng, L., Wang, K., & Rousset, B. (2019, 08). Spatio-temporal foreshock evolution of the 2019 M 6.4 and M 7.1 Ridgecrest, California Earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.
- 9722 Singleton, D. M., Maloney, J. M., Brothers, D. S., Driscoll, N. W., Kluesner, J. W., & Sliter, R. W. (2019, 08). Recent faulting in south San Diego Bay: A Rose Canyon – San Miguel-Vallecitos fault connection?. Poster Presentation at 2019 SCEC Annual Meeting.
- 9724 Tamhidi, A., Kuehn, N., Bozorgnia, Y., Taciroglu, E., & Kishida, T. (2019, 08). Prediction of Ground-Motion Time-Series at an arbitrary location using Gaussian Process Interpolation: Application to the Ridgecrest Earthquake. Poster Presentation at 2019 SCEC Annual Meeting.
- 9726 Barbery, M. R., Chester, F. M., & Chester, J. S. (2019, 08). Controlling the life-time and rest-time of asperity contact populations to investigate the temperature and stress distribution in flash-weakened frictional surfaces in granite. Poster Presentation at 2019 SCEC Annual Meeting.
- 9729 González-García, J., González-Ortega, A., Robles-Avalos, J., & Martínez-Barcelona, H. (2019, 08). GeodVel: it's the better geodetic Plate Tectonic model at the border between NorthAmerica and Pacific?. Poster Presentation at 2019 SCEC Annual Meeting.

- 9732 Milliner, C., Donnellan, A., Chen, R., Zinke, R., Xu, X., Morelan, A. E., Dawson, T., Madugo, C. M., Dolan, J. F., Sarmiento, A., Bozorgnia, Y., & Ansar, A. (2019, 08). OR-Corr a New Outlier-Resistant Image Correlation Method: Examples of Surface Deformation and Complex Fracturing from the 2019 Ridgecrest Earthquake Sequence Imaged by High-resolution Optical and Radar Imagery . Poster Presentation at 2019 SCEC Annual Meeting.
- 9735 Montesi, L. G., Izquierdo, K., Allison, K. L., Holt, W. E., Bahadori, A., Hirth, G., Shinevar, W., & Oskin, M. E. (2019, 08). Rheology of Southern California from Mineral to Regional Scale. Oral Presentation at 2019 SCEC Annual Meeting.
- 9736 McPhillips, D., & Scharer, K. M. (2019, 08). Preliminary survey of fragile geological features for use as ground motion constraints, southern Oregon. Poster Presentation at 2019 SCEC Annual Meeting.
- 9733 Zhai, G., Shirzaei, M., & Manga, M. (2019, 08). Unified hydromechanical and nucleation models for induced seismicity in Western Oklahoma and South-Central Kansas. Poster Presentation at 2019 SCEC Annual Meeting.
- 9738 Ferrarini, F., Arrowsmith, R., Brozzetti, F., de Nardis, R., Cirillo, D., & Lavecchia, G. (2019, 08). Seismogenic compression in southern Italy? Morphotectonic analysis to detect possible evidence of Late Quaternary tectonics along the Southern Apennine Outer Front. Poster Presentation at 2019 SCEC Annual Meeting.
- 9743 Gonzalez-Ortega, A., Velazquez-Zaguilan, A., González-García, J., & Sandwell, D. T. (2019, 08). Strain accumulation in the Southernmost Section of the San Andres fault system in northern Baja California, Mexico. Poster Presentation at 2019 SCEC Annual Meeting.
- 9745 Ramirez-Guzman, L. (2019, 08). Towards High Order Octree-Based Finite Element Earthquake Simulations. Poster Presentation at 2019 SCEC Annual Meeting.
- 9746 Graves, R. W. (2019, 08). 3D ground motion simulations for small to moderate magnitude events in the Ridgecrest sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9742 Ben-Zion, Y., Benthien, M., Ballmann, J., & Goulet, C. A. (2019, 08). Pre-earthquake Response: Closing critical data gaps and preparing for large earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.
- 9747 Hirth, G. (2019, 08). What is a Fault Zone - inferences from stress state. Oral Presentation at 2019 SCEC Annual Meeting.
- 9751 Silva, F., Maechling, P. J., & Goulet, C. A. (2019, 08). The SCEC Broadband Platform: Open-Source Software for Strong Ground Motion Simulation and Validation. Poster Presentation at 2019 SCEC Annual Meeting.
- 9753 Givler, R., Hartleb, R., Kemp, C. D., Szymanski, M., Lindvall, S. C., Gray, B., Rockwell, T. K., & Bell, R. (2019, 08). Paleoseismic Results from a Trench across the Casa Loma Strand of the San Jacinto Fault Zone in San Jacinto, California . Poster Presentation at 2019 SCEC Annual Meeting.
- 9727 King, E., Klimasewski, A., Sahakian, V. J., & Baltay, A. S. (2019, 08). Source and Site Spectral Inversion for k_0 Computation in the Bay Area. Poster Presentation at 2019 SCEC Annual Meeting.
- 9709 Plesch, A., Shaw, J. H., Ross, Z. E., & Hauksson, E. (2019, 08). Detailed 3D source fault representations for the 2019 Ridgecrest earthquake sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9756 Allam, A. A., Catchings, R. D., Steidl, J. H., Berg, E. M., Downey, N., Ben-Zion, Y., Goldman, M. R., Chan, J. H., Criley, C. J., Langermann, D., McEvilly, A. T., Ma, Z., & Mongovin, D. D. (2019, 08). A Multiscale Seismic Deployment with 463 Sensors Following the 2019 Ridgecrest Earthquake Sequence in Eastern CA. Poster Presentation at 2019 SCEC Annual Meeting.
- 9754 Avouac, J., Gualandi, A., Michel, S. G., & Faranda, D. (2019, 08). The Predictable Chaos of Slow Earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.

- 9759 Crouse, C., Goulet, C. A., Jordan, T. H., Milner, K. R., Pauk, E., Callaghan, S., & Graves, R. W. (2019, 08). Simulation-Informed Site-Specific Design Spectra for Engineers: New Beta Version Including ASCE 7-16, ASCE 41-17 and LATBSDC Standards. Poster Presentation at 2019 SCEC Annual Meeting.
- 9721 Zhou, B., Bailey, I. W., & Ben-Zion, Y. (2019, 08). Evolving seismic and aseismic slip on a heterogeneous frictional fault with heat generation and temperature-dependent creep. Poster Presentation at 2019 SCEC Annual Meeting.
- 9765 An, Y., Taira, T., Li, C., & Peng, Z. (2019, 08). Seismic Velocity Changes Associated with the 2019 Ridgecrest Earthquake Sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9761 Hightower, E. J., & Avouac, J. (2019, 08). Revisiting the Earthquake Interevent Time Distribution and the Poisson Model with the QTM Catalog for Southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9766 Zhang, Y., & Mooney, W. D. (2019, 08). Evaluating Seismicity Patterns in Western China. Poster Presentation at 2019 SCEC Annual Meeting.
- 9771 Allison, K. L. (2019, 08). Shear localization from the interplay between fault motion and grain size evolution. Poster Presentation at 2019 SCEC Annual Meeting.
- 9770 Shelly, D. R. (2019, 08). Foreshocks, Aftershocks, and Faulting Complexity: the 2019 Ridgecrest Earthquake Sequence in High Resolution. Poster Presentation at 2019 SCEC Annual Meeting.
- 9772 Burns, J. E., McGill, S. F., Rhodes, E. J., Dolan, J. F., & Brown, N. D. (2019, 08). Dating of Offset Geomorphic Features Along the Garlock Fault, Mojave Desert, California: Testing a Proposed Earthquake Supercycle Model. Poster Presentation at 2019 SCEC Annual Meeting.
- 9774 Mazzoni, S., Kashida, T., Wang, P., Ahdi, S. K., Bozorgnia, Y., & Stewart, J. P. (2019, 08). Strong Ground Motions from 2019 Ridgecrest Earthquake Sequence Mainshocks. Poster Presentation at 2019 SCEC Annual Meeting.
- 9775 Hirakawa, E. T., & Aagaard, B. T. (2019, 08). Evaluation and Adjustments of the USGS San Francisco Bay Area Velocity Model: Special Focus on the East Bay. Poster Presentation at 2019 SCEC Annual Meeting.
- 9760 Daniels, C., Peng, Z., McClellan, J., & Zhu, L. (2019, 08). Identification of Overlapping Earthquakes using a moveout-based matching pursuit method. Poster Presentation at 2019 SCEC Annual Meeting.
- 9779 Kendrick, K. J., Akciz, S. O., Angster, S. J., Avouac, J., Bachhuber, J. L., Bennett, S. E., Blake, K., Bork, S., Brooks, B. A., Burgess, P., Chupik, C., Dawson, T., DeFrisco, M. J., Delano, J., DeLong, S., Dolan, J. F., DuRoss, C. B., Ericksen, T., Frost, E., Gold, R. D., Graehl, N. A., Haddon, E. K., Hatem, A. E., Hernandez, J. L., Hitchcock, C., Hudnut, K. W., Koehler, R. D., Kozaci, O., Ladinsky, T., Madugo, C. M., Mareschal, M., McPhillips, D., Milliner, C., Morelan, A. E., Nevitt, J., Olson, B., Padilla, S. E., Patton, J. R., Philibosian, B., Pickering, A., Pierce, I., Ponti, D. J., Pridmore, C., Rosa, C., Roth, N., Scharer, K. M., Seitz, G. G., Spangler, E., Swanson, B. J., Thomas, K., Thompson Jobe, J., Treiman, J. A., Williams, A. M., & Oskin, M. E. (2019, 08). Geologic observations of surface fault rupture associated with the Ridgecrest M6.4 and M7.1 earthquake sequence by the Ridgecrest Rupture Mapping Group. Poster Presentation at 2019 SCEC Annual Meeting.
- 9782 Field, E. H. (2019, 08). Improving Earthquake Rupture Forecasts (Using California as a Guide). Poster Presentation at 2019 SCEC Annual Meeting.
- 9784 Elbanna, A. E. (2019, 08). Dynamic Rupture Propagation on Fault Planes with Explicit Representation of Short Branches: Stress Heterogeneity, High Frequency Generation, and Novel Supershear Transition Mechanism. Poster Presentation at 2019 SCEC Annual Meeting.
- 9787 Su, M., Maechling, P. J., Marshall, S. T., Nicholson, C., Plesch, A., Shaw, J. H., Pauk, E., Huynh, T. T., & Hearn, E. H. (2019, 08). A Queryable Map-Based Web Interface to the SCEC Community Fault Model. Poster Presentation at 2019 SCEC Annual Meeting.

- 9703 Veeraraghavan, S., Bolisetti, C., Slaughter, A., Hoffman, W., & Coleman, J. (2019, 08). MASTODON: An open source finite element tool to model seismic response of structures. Poster Presentation at 2019 SCEC Annual Meeting.
- 9789 Dorsett, J. H., Johnson, K. M., Puel, S., & Becker, T. W. (2019, 08). Postseismic deformation and stress evolution following the 2019 M 7.1 and M 6.4 Ridgecrest earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.
- 9795 Farghal, N., & Baltay, A. S. (2019, 08). Strain-estimated ground motions of recent earthquakes in California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9794 Young, E. K., Scharer, K. M., Keen-Zebert, A., Anderson-Merritt, E., Cowgill, E. S., & Weldon, R. J. (2019, 08). New interpretations at the Ranch Center and Key Slide slip rate sites, Mojave section of the San Andreas Fault, Palmdale, CA. Poster Presentation at 2019 SCEC Annual Meeting.
- 9791 Yule, D., Matti, J. C., Kendrick, K. J., & Heermance, R. V. (2019, 08). Evidence for inactivity since ~100 ka on the northern route of the San Andreas fault, southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9797 Pauk, E., Huynh, T. T., Su, M., & Maechling, P. J. (2019, 08). The Future of the SCEC Community Information System. Poster Presentation at 2019 SCEC Annual Meeting.
- 9800 Dillavou, S., Stin, V., & Rubinstein, S. M. (2019, 08). Table-top nucleation. Poster Presentation at 2019 SCEC Annual Meeting.
- 9781 Jiang, J., & Lohman, R. B. (2019, 08). Time-dependent deformation and seismicity in the Imperial Valley, California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9798 Mao, S., Mordret, A., Campillo, M., Fang, H., & van der Hilst, R. (2019, 08). On The Measurement Of Seismic Travel-Time Changes In The Time-Frequency Domain With Wavelet Cross-Spectral Analysis . Poster Presentation at 2019 SCEC Annual Meeting.
- 9804 Lai, V., Graves, R. W., Zhan, Z., Yu, C., & Helmberger, D. V. (2019, 08). Analyzing Shallow Basin Effects in Los Angeles Basin using 3D Simulations and Dense Array Analysis. Poster Presentation at 2019 SCEC Annual Meeting.
- 9808 Maloney, J. M. (2019, 08). Mysteries of the Deep: Faulting in the offshore California Continental Borderlands. Oral Presentation at 2019 SCEC Annual Meeting.
- 9769 Fletcher, J. M., Gonzalez-Ortega, A., Rockwell, T. K., Gold, P. O., & Oskin, M. E. (2019, 08). Active faulting south of the border; the other half of the big bend domain of the Pacific-North American plate margin. Oral Presentation at 2019 SCEC Annual Meeting.
- 9806 Hearn, E. H., & Williams, C. A. (2019, 08). Postseismic deformation models for the July 2019 Ridgecrest earthquakes: Applications of the SCEC Community Rheology Model. Poster Presentation at 2019 SCEC Annual Meeting.
- 9811 Wang, X., Minyan, Z., & Zhongwen, Z. (2019, 08). Bayesian array-based Receiver Function (RF): Towards stable, reliable, and easy-to-interpret RFs. Poster Presentation at 2019 SCEC Annual Meeting.
- 9810 Liu, X., & Beroza, G. C. (2019, 08). Ambient Noise Love Wave Attenuation Inversion using the LASSIE Array through Los Angeles Basin. Poster Presentation at 2019 SCEC Annual Meeting.
- 9815 Chen, K., Avouac, J., AATI, S., Milliner, C., Zheng, F., & Shi, C. (2019, 08). Cascading, pulse-like ruptures during the 2019 Ridgecrest earthquakes, East California Shear Zone. Poster Presentation at 2019 SCEC Annual Meeting.
- 9817 Padilla, S. E., Akciz, S. O., Hatem, A. E., Dolan, J. F., & Mapping Group, R. (2019, 08). Fault slip distribution along the southern 15 km of the M7.1 Ridgecrest earthquake surface rupture. Poster Presentation at 2019 SCEC Annual Meeting.
- 9818 Cortez, J., Kyriakopoulos, C., Wu, B., Oglesby, D. D., Douilly, R., Funning, G., & Ghosh, A. (2019, 08). Modeling the 2019 Ridgecrest Earthquake Sequence. Poster Presentation at 2019 SCEC Annual Meeting.

- 9820 Moschetti, M. P., Thompson, E. M., Luco, N., Jordan, T. H., Powers, P. M., Shumway, A. M., Petersen, M. D., Graves, R. W., Callaghan, S., Goulet, C. A., Milner, K. R., Maechling, P. J., Wang, F., & Rekoske, J. (2019, 08). An empirical- and simulation-based ground-motion model for Southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9803 Zhang, J., Chen, X., & Abercrombie, R. E. (2019, 08). Resolving the spatiotemporal variability of small earthquake source parameters at Parkfield and their relationship with 2004M6 Parkfield earthquake. Poster Presentation at 2019 SCEC Annual Meeting.
- 9822 Funning, G., Floyd, M., & Terry, R. L. (2019, 08). Distinguishing slip from the M6.4 and M7.1 Ridgecrest earthquakes using campaign GPS data. Poster Presentation at 2019 SCEC Annual Meeting.
- 9805 Tucker, A., Bormann, J. M., & Driscoll, N. W. (2019, 08). Refining the location of the coastal Newport-Inglewood fault with Structure from Motion photogrammetric models and shallow marine seismic profiling. Poster Presentation at 2019 SCEC Annual Meeting.
- 9827 Hayashida, T., Yokoi, T., & Bhattarai, M. (2019, 08). Estimation of shear wave velocity structure using joint inversion of surface-wave phase and group velocities derived from ambient noise recordings. Poster Presentation at 2019 SCEC Annual Meeting.
- 9826 Yoon, C., Schwarz, S., & Thomas, V. (2019, 08). Earthquake Notification Service (ENS): Present Capabilities and Next-Generation Product Ideas. Poster Presentation at 2019 SCEC Annual Meeting.
- 9788 Wu, B., Oglesby, D. D., Cortez, J., & Kyriakopoulos, C. (2019, 08). Dynamic stress perturbation on the M7.1 Ridgecrest earthquake fault from the preceding M6.4 event: a theoretical study with dynamic rupture models. Poster Presentation at 2019 SCEC Annual Meeting.
- 9834 Donnellan, A., Lyzenga, G. A., Parker, J. W., Ansar, A., Goulet, C. A., Ben-Zion, Y., Vernon, F. L., & Lynch, D. K. (2019, 08). Targeted High-Resolution Topographic Imaging of Active Faults and the Ridgecrest Earthquake Sequence Ruptures in Southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9831 Peña, K. A., McGill, S. F., Rhodes, E. J., Dolan, J. F., Brown, N. D., Castillo, B. A., Hatem, A. E., Saha, S., & Zinke, R. (2019, 08). Paleoseismic Results from the Christmas Canyon West Site, Central Garlock Fault, Searles Valley, California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9838 Thompson, E. M., Hearne, M., Rekoske, J., Schovanec, H., Moschetti, M. P., Aagaard, B. T., & Parker, G. A. (2019, 08). Automated processing of the 2019 Ridgecrest, California, earthquake sequence ground motions. Poster Presentation at 2019 SCEC Annual Meeting.
- 9832 Inserra, N. J., & Akciz, S. O. (2019, 08). Late Holocene Rupture History of the South-Central San Andreas Fault at Van Matre Ranch, California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9835 Shakibay Senobari, N., Zimmerman, Z., Funning, G., Shearer, P. M., Brisk, P., & Keogh, E. (2019, 08). Using the Matrix Profile to detect seismic events – from the lab experiment scale to local and global scales. Poster Presentation at 2019 SCEC Annual Meeting.
- 9841 Liu, C., Lay, T., Brodsky, E. E., Dascher-Cousineau, K., & Xiong, X. (2019, 08). Co-seismic rupture process of the large 2019 Ridgecrest earthquakes from joint inversion of geodetic and seismological observations. Poster Presentation at 2019 SCEC Annual Meeting.
- 9836 Kyriakopoulos, C., Wu, B., & Oglesby, D. D. (2019, 08). The Cajon Pass Earthquake Gate: the effect of topography on dynamic rupture models. Poster Presentation at 2019 SCEC Annual Meeting.
- 9842 Werner, M. J., Savran, W. H., Maechling, P. J., Jordan, T. H., Schorlemmer, D., Rhoades, D. A., Marzocchi, W., & Yu, J. (2019, 08). An Update on the Collaboratory for the Study of Earthquake Predictability (CSEP). Poster Presentation at 2019 SCEC Annual Meeting.
- 9839 Dorsey, M. T., Chester, J. S., & Chester, F. M. (2019, 08). Older and Deeper Seismic Deformation in the San Gabriel Crystalline Basement Complex Along the South Branch of the Punchbowl Fault. Poster Presentation at 2019 SCEC Annual Meeting.
- 9844 Kozaci, O., Madugo, C. M., Bachhuber, J. L., Hitchcock, C., Kottke, A. R., & Herr, K. (2019, 08). Rapid post-earthquake reconnaissance and paleoseismic trenching preliminary results for the M6.4 and

M7.1 Ridgecrest earthquake sequence, Southern California. Poster Presentation at 2019 SCEC Annual Meeting.

9847 Seitz, G. G., Mareschal, M., Dawson, T., & Milliner, C. (2019, 08). The Origin of Surface Cracks from the 2019 Ridgecrest Earthquake Sequence M6.4 and M7.1 Fault Zones: Primary Faulting, Triggered Slip or Shaking Related; Can we tell the difference?. Poster Presentation at 2019 SCEC Annual Meeting.

9846 Bilham, R., & Bryan, C. (2019, 08). Triggered slip and afterslip in the 2019 Ridgecrest earthquakes: evidence for rotation of fault zone fabrics. Poster Presentation at 2019 SCEC Annual Meeting.

9833 Thatcher, W. R., Hearn, E. H., Oskin, M. E., Montesi, L. G., Hirth, G., Behr, W. M., Plesch, A., & Shaw, J. H. (2019, 08). Preliminary SCEC Community Rheology Model. Poster Presentation at 2019 SCEC Annual Meeting.

9854 Day, S. M. (2019, 08). Beyond elasticity in ground motion simulations. Oral Presentation at 2019 SCEC Annual Meeting.

9853 Biasi, G. P., Anderson, J. G., Brune, J. N., & Brune, R. J. (2019, 08). Ground Motion Prediction Constraints and Hazard Curve Evaluation in Southern California Using Precariously Balanced Rocks. Poster Presentation at 2019 SCEC Annual Meeting.

9809 Nevitt, J. (2019, 08). Fault behavior at and near Earth's surface. Oral Presentation at 2019 SCEC Annual Meeting.

9856 Stanciu, A., & Humphreys, E. D. (2019, 08). Imaging the Upper Mantle Seismic Structure Beneath Southern California. Poster Presentation at 2019 SCEC Annual Meeting.

9859 Mendoza, M. M., Li, B., Ghosh, A., & Rai, S. S. (2019, 08). A Systematic Investigation into Dynamic and Delayed Earthquake Triggering in a Seismically Hazardous Himalayan Fault Segment. Poster Presentation at 2019 SCEC Annual Meeting.

9860 Wang, J., & Tanimoto, T. (2019, 08). Mapping Near-Surface Rigidity Structure using Co-located Pressure and Seismic Stations from the EarthScope Transportable Array. Poster Presentation at 2019 SCEC Annual Meeting.

9858 Yang, L., Liu, X., Zhu, W., & Beroza, G. C. (2019, 08). Evaluation of Deep, Widespread Seismicity with Long Beach Dense Array. Poster Presentation at 2019 SCEC Annual Meeting.

9857 Archuleta, R. J., & Ji, C. (2019, 08). Empirical Self-similar Double-corner Frequency Spectrum as a Model for the Earthquake Source. Poster Presentation at 2019 SCEC Annual Meeting.

9825 Sahakian, V. J., Driscoll, N. W., Derosier, B., Oller, B., Klimasewski, A. R., & Stock, J. M. (2019, 08). Shallow Surface Deformation on the Southern Imperial Fault System from Marine Subsurface Imaging Data. Poster Presentation at 2019 SCEC Annual Meeting.

9863 Miranda, E. A., Zamora-Tamayo, M., Schwartz, J., Bautista, J., & Akciz, S. O. (2019, 08). Rheology of the Borrego Springs Shear Zone segment of the Eastern Peninsular Ranges Mylonite Zone: implications for the development of the Community Rheology Model. Poster Presentation at 2019 SCEC Annual Meeting.

9855 Young, Z. M., & Kreemer, C. W. (2019, 08). Drought Induced Groundwater Loss in and Around Great Salt Lake, Utah, Inferred from 3D GPS Displacements. Poster Presentation at 2019 SCEC Annual Meeting.

9861 Yun, S., Liang, J., Fielding, E. J., Liang, C., Owen, S. E., Hua, H., & Lucas, M. (2019, 08). ARIA Rapid Response Products for the 2019 Ridgecrest Earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.

9867 Goulet, C. A., Meng, X., Donnellan, A., & Lyzenga, G. A. (2019, 08). Survey of Damaged Tufa Pinnacles in Trona Following the 2019 M7.1 Ridgecrest Earthquake. Poster Presentation at 2019 SCEC Annual Meeting.

- 9866 Brackman, A., Torres, J. A., Schwartz, J., Miranda, E. A., & Akciz, S. O. (2019, 08). Dating the duration of deformation along a major shear zone within the Eastern Peninsular Ranges Batholith. Poster Presentation at 2019 SCEC Annual Meeting.
- 9830 Grant Ludwig, L. (2019, 08). Ethical considerations for research on Fragile Geologic Features. Poster Presentation at 2019 SCEC Annual Meeting.
- 9824 Hatch, R. L., Smith, K. D., Abercrombie, R. E., Ruhl, C. J., Hammond, W. C., & Pierce, I. (2019, 08). Recent Damaging Earthquakes on Conjugate Structures in the Walker Lane: Characteristics of the The Nine Mile Ranch Sequence (2016-2019) and Comparison to the Ridgecrest Sequence of 2019. Poster Presentation at 2019 SCEC Annual Meeting.
- 9869 Smith-Konter, B. R., Ward, L. A., Xu, X., & Sandwell, D. T. (2019, 08). Vertical Deformation of the 2019 M6.4 Searles Valley and M7.1 Ridgecrest Earthquakes. Poster Presentation at 2019 SCEC Annual Meeting.
- 9868 Boyd, D., & Bormann, J. M. (2019, 08). Termination of the Palos Verdes Fault at Lasuen Knoll: Evaluating Models of Geometry, Kinematics and Potential Connectivity. Poster Presentation at 2019 SCEC Annual Meeting.
- 9814 DeFrisco, M. J. (2019, 08). An Updated Evaluation of the Rose Canyon Fault, San Diego, California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9874 Ghosh, A., Mendoza, M. M., Niyogi, S., Chaudhuri, K., Wu, B., & Birkey, A. (2019, 08). A rapid seismic deployment to capture aftershock sequence of 2019 Mw 7.1 Ridgecrest earthquake. Poster Presentation at 2019 SCEC Annual Meeting.
- 9862 Legg, M. R., & Kamerling, M. J. (2019, 08). Terrane Boundary Definition for the Borderland Geologic Framework SCEC5 Community Rheology Model. Poster Presentation at 2019 SCEC Annual Meeting.
- 9877 Bartlow, N. M., Chadwell, D., Wallace, L. M., Yohler, R., Schmidt, D. A., Zumberge, M. A., Webb, S., & Newman, A. (2019, 08). Recent observations and new frontiers in seafloor geodesy. Oral Presentation at 2019 SCEC Annual Meeting.
- 9881 Kanaya, T. (2019, 08). Fault Stabilization by Dilatant Hardening in Granular Rocks. Poster Presentation at 2019 SCEC Annual Meeting.
- 9882 O'Reilly, O., Breuer, A. N., Cui, Y., Goulet, C. A., Olsen, K. B., Roten, D., Thomas-Collignon, G., & Yeh, T. (2019, 08). Simulation of elastic waves in the presence of topography using a curvilinear staggered grid finite difference method. Poster Presentation at 2019 SCEC Annual Meeting.
- 9843 Haddon, E. K., Bennett, S. E., Patton, J. R., Kendrick, K. J., Oglesby, D. D., Olson, B., DuRoss, C. B., & Pickering, A. (2019, 08). Coseismic Variations in Slip Orientation from Curved Striations and Projectile Playa Soils during the 2019 M7.1 Ridgecrest Earthquake. Poster Presentation at 2019 SCEC Annual Meeting.
- 9873 McKinney, E., Wade, A., Madugo, C. M., & Kozaci, O. (2019, 08). Resolving Ridgecrest complex deformation modes characterized with differential LiDAR topography. Poster Presentation at 2019 SCEC Annual Meeting.
- 9879 Menges, C. M., & Mahan, S. A. (2019, 08). STRATIGRAPHIC AND GEOCHRONOLOGIC CONSTRAINTS ON TIME-SPACE PATTERNS OF LATEST QUATERNARY SURFACE RUPTURES ON THE EASTERN PINTO MOUNTAIN AND SOUTHERN MESQUITE LAKE FAULT ZONES NEAR TWENTYNINE PALMS, SOUTHERN CALIFORNIA. Poster Presentation at 2019 SCEC Annual Meeting.
- 9876 Abercrombie, R. E., Chen, X., & Zhang, J. (2019, 08). Just how similar are individual earthquakes within repeating sequences at Parkfield?. Poster Presentation at 2019 SCEC Annual Meeting.
- 9884 Idini, B., Simons, M., Zhong, M., Stephenson, O., Ross, Z. E., Fielding, E. J., Yun, S., Hauksson, E., Milliner, C., Moore, A. W., & Liu, Z. (2019, 08). The first few days of the 2019 Ridgecrest earthquake sequence. Poster Presentation at 2019 SCEC Annual Meeting.

- 9885 Smith, D. E., McGuire, J., Good, A., Guiwits, S., O'Rourke, C., & Chung, A. I. (2019, 08). Developments in EEW testing: Including large magnitude events in the new test suite. Poster Presentation at 2019 SCEC Annual Meeting.
- 9886 Williams, A. M., Pierce, I., Koehler, R. D., Akciz, S. O., Chupik, C., & Bormann, J. M. (2019, 08). Detailed fracture map and orthophoto of the southern portion of the M6.4 2019 Ridgecrest Earthquake. Poster Presentation at 2019 SCEC Annual Meeting.
- 9887 Wang, K., & Bürgmann, R. (2019, 08). Modeling of co- and early postseismic deformation due to the 2019 Ridgecrest earthquake sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9890 Ortez, R., & Rundle, J. B. (2019, 08). A Percolation Model for Induced Seismicity: An Avalanche Burst Model for Induced b-Value Seismicity.. Poster Presentation at 2019 SCEC Annual Meeting.
- 9883 Fielding, E. J., Stephenson, O., Zhong, M., Sangha, S. S., Liang, C., Huang, M., Liu, Z., Yun, S., Simons, M., & Brooks, B. A. (2019, 08). SAR Imaging of the Coseismic and Early Postseismic Deformation from the 2019 Mw 7.1 and Mw 6.4 Ridgecrest Earthquakes in California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9895 Chen, X., Wu, Q., Yao, D., & Peng, Z. (2019, 08). Source characteristics of the foreshock sequence of the 2010 M7.2 El Mayor-Cucapah earthquake: implication for the triggering process. Poster Presentation at 2019 SCEC Annual Meeting.
- 9904 Zhang, Y., Williams, E. F., Lambert, V. R., & Zhan, Z. (2019, 08). Updating the Caltech Millkan Shaker for time-lapse seismic imaging in Southern California. Poster Presentation at 2019 SCEC Annual Meeting.
- 9905 Liu, Z., Lundgren, P., & Liang, C. (2019, 08). Imaging tectonic and anthropogenic processes using ALOS-2 and Sentinel-1 InSAR. Poster Presentation at 2019 SCEC Annual Meeting.
- 9906 Shi, J., & Asimaki, D. (2019, 08). A Site Response Module Toolbox for the Broadband Platform: Implementation and Verification. Poster Presentation at 2019 SCEC Annual Meeting.
- 9907 Stewart, J. P., Brandenburg, S. J., Wang, P., Nweke, C., Hudson, K. S., Mazzoni, S., Bozorgnia, Y., Hudnut, K. W., Davis, C. A., Ahdi, S. K., Zareian, F., Fayaz, J., Koehler, R. D., Chupik, C., Pierce, I., Williams, A., Akciz, S. O., Hudson, M. B., Kishida, T., Brooks, B. A., Gold, R. D., Ponti, D. J., Scharer, K. M., McPhillips, D., Ericksen, T., Hernandez, J., Patton, J. R., Olson, B., Dawson, T., Treiman, J. A., DuRoss, C. B., Blake, K., Bachhuber, J. L., Madugo, C. M., Sun, J., Donnellan, A., Lyzenga, G. A., Conway, E. M., & Goulet, C. A. (2019, 08). Engineering and Geological Effects of the July 2019 Ridgecrest Earthquake Sequence. Poster Presentation at 2019 SCEC Annual Meeting.
- 9909 Cattania, C., Hainzl, S., & Segall, P. (2019, 08). Foreshocks and aftershocks on geometrically complex faults. Oral Presentation at 2019 SCEC Annual Meeting.
- 9913 Lindsey, N. J., Dawe, T., & Ajo-Franklin, J. (2019, 08). Crossing the shoreline with DAS: Photonic seismology in Monterey Bay using the MARS cable. Oral Presentation at 2019 SCEC Annual Meeting.
- 9919 Miranda, E. A. (2019, 08). What is a fault zone? A perspective from beneath the brittle-ductile transition. Oral Presentation at 2019 SCEC Annual Meeting.
- 9920 Gabriel, A. (2019, 08). Multi-scale and multi-physics modeling of puzzling earthquake dynamics. Oral Presentation at 2019 SCEC Annual Meeting.
- 9922 Mitchell, T. M. (2019, 08). What is a FZ? Spatial and temporal variations in crustal fault zone structure and associated properties. Oral Presentation at 2019 SCEC Annual Meeting.
- 9923 Brandenburg, S. J., & GEER Reconnaissance Team, .. (2019, 08). GEER Reconnaissance following the 2019 Ridgecrest Earthquake Sequence. Oral Presentation at 2019 SCEC Annual Meeting.
- 9989 Reed, M. P., Burgette, R. J., Scharer, K. M., Lifton, N., & McPhillips, D. (2019, 09). Assessment of slip and deformation along the Santa Susana fault, southern California using high resolution topography. Oral Presentation at Geological Society of America Annual Meeting.

- 10022 Bijelic, N., Lin, T., & Deierlein, G. (2020, 09). Sustained amplitude (RSx) and significant duration (Da) spectra for seismic risk assessment in sedimentary basins. Oral Presentation at 17th World Conference on Earthquake Engineering (17WCEE).
- 10023 Baker, J. W., Markhvida, M., & Chen, Y. (2020, 09). Progress in measuring spatial correlations in ground motion intensity. Oral Presentation at 17th World Conference on Earthquake Engineering, 17WCEE.
- 10041 Withers, K. B., Ma, S., Ampuero, J., Dalguer, L. A., Wang, Y., & Goulet, C. A. (2019). Validation of Broadband Ground Motion from Dynamic Rupture Simulations: towards better characterizing seismic hazard for engineering applications. Poster Presentation at AGU Annual Meeting.
- 10042 Withers, K. B., Ma, S., Ampuero, J., Dalguer, L. A., Wang, Y., & Goulet, C. A. (2020). Update - Dynamic Rupture Code Validation Project. Oral Presentation at SCEC Dynamic Rupture Group Ingredients Workshop on Fault Friction.
- 10044 Barnard, A., Saifullah, K., & Wittich, C. (2019, 11). Scaled shake table tests: free-standing structures with varying footprint geometry. Poster Presentation at American Geophysical Union.
- 10045 Saifullah, K., Barnard, A., & Wittich, C. (2020, 09). Impact of interface geometry on the seismic response of freestanding structures. Oral Presentation at 17th World Conference on Earthquake Engineering.
- 10061 Stanciu, A., & Humphreys, E. D. (2019, 12). An improved tomographic model for southern California upper mantle seismic structure. Poster Presentation at 2019 AGU Fall Meeting.
- 10090 Lambert, V. R., & Lapusta, N. (2019, 06). Energy budget of dynamic shear ruptures: connecting remote observations with local physical behavior. Poster Presentation at Engineering Mechanics Institute.
- 10091 Lambert, V. R. (2019, 07). Energy budget of earthquakes: connecting remote observations with local physical behavior. Oral Presentation at Numerical Modeling of Earthquake Motions.
- 10092 Lambert, V. R., & Lapusta, N. (2019, 12). Combining kinematic and energetic inferences to constrain physical conditions for the low-stress, low-heat operation of mature faults. Poster Presentation at American Geophysical Union Fall Meeting.
- 10093 Lambert, V. R., & Lapusta, N. (2020, 01). Constraining physical conditions for the low-stress, low-heat operation of mature faults. Oral Presentation at SCEC Dynamic Rupture Group Ingredients Workshop on Fault Friction.
- 10169 Baker, J. W., Rezaeian, S., Goulet, C. A., Luco, N., & Teng, G. (2020, 07). Selection of CyberShake Simulated Ground Motion Time Series for Engineering Analysis. Poster Presentation at 2020 SCEC Annual Meeting.
- 10185 White, M. C., Fang, H., Catchings, R. D., Goldman, M. R., Steidl, J. H., & Ben-Zion, Y. (2020, 07). Detailed traveltimes tomography and seismicity around the 2019 M7.1 Ridgecrest, CA, earthquake using dense rapid-response seismic data. Poster Presentation at 2020 SCEC Annual Meeting.
- 10186 Qiu, H., Ben-Zion, Y., Catchings, R. D., Goldman, M. R., Allam, A. A., & Steidl, J. H. (2020, 07). Detailed seismic imaging of the Mw7.1 Ridgecrest earthquake rupture zone from data recorded by dense linear arrays. Poster Presentation at 2020 SCEC Annual Meeting.
- 10188 Lu, Y., & Ben-Zion, Y. (2020, 07). Validation of seismic velocity models in southern California with full-waveform simulations. Poster Presentation at 2020 SCEC Annual Meeting.
- 10192 Hardebeck, J. L. (2020, 07). A Stress-Similarity Triggering Model for Aftershocks of the Mw 6.4 and 7.1 Ridgecrest Earthquakes. Oral Presentation at 2020 SCEC Annual Meeting.
- 10198 Cheng, Y., & Ben-Zion, Y. (2020, 07). Variations of earthquake properties before, during and after the 2019 M7.1 Ridgecrest, CA, earthquake. Poster Presentation at 2020 SCEC Annual Meeting.
- 10202 Boschelli, J., Moschetti, M. P., & Sens-Schönfelder, C. (2020, 07). Temporal Seismic Velocity Variations: Recovery Following from the 2019 Mw 7.1 Ridgecrest Earthquake. Poster Presentation at 2020 SCEC Annual Meeting.

- 10205 Philiposian, B., Thompson Jobe, J., Chupik, C., Dawson, T., Bennett, S. E., Gold, R. D., DuRoss, C. B., Ladinsky, T., Kendrick, K. J., Haddon, E. K., Pierce, I., Swanson, B. J., & Seitz, G. G. (2020, 07). Evidence of previous faulting along the 2019 Ridgecrest earthquake ruptures. Poster Presentation at 2020 SCEC Annual Meeting.
- 10206 Stewart, J. P., Nweke, C., Brandenberg, S. J., Goulet, C. A., & Graves, R. W. (2020, 07). Modeling site response effects in sedimentary basins. Oral Presentation at 2020 SCEC Annual Meeting.
- 10208 Zhou, B., Zaliapin, I., Johnson, C. W., Fu, Y., Chanard, K., & Ben-Zion, Y. (2020, 07). Environmental triggering of seismicity in California . Poster Presentation at 2020 SCEC Annual Meeting.
- 10209 Trugman, D. T., Ross, Z. E., & Johnson, P. A. (2020, 07). Imaging Stress and Faulting Complexity Through Earthquake Waveform Similarity. Oral Presentation at 2020 SCEC Annual Meeting.
- 10211 Mouslopoulou, V., Nicol, A., & Walsh, J. (2020, 07). Millennial to million year slip-rate variations on active faults. Oral Presentation at 2020 SCEC Annual Meeting.
- 10215 Parker, G. A., & Baltay, A. S. (2020, 07). Empirical Map-Based Models of Nonergodic Site Response in the Greater Los Angeles Area. Poster Presentation at 2020 SCEC Annual Meeting.
- 10222 Allison, K. L., & Montesi, L. G. (2020, 07). Three definitions of ductile shear zones resulting from grain-size evolution below a frictional fault. Poster Presentation at 2020 SCEC Annual Meeting.
- 10225 Zhu, W., Yang, Y., Allison, K. L., & Dunham, E. M. (2020, 07). Ascending fluids and overpressure pulses on faults drive aseismic slip and swarm seismicity. Poster Presentation at 2020 SCEC Annual Meeting.
- 10227 Zaliapin, I. (2020, 07). Localization and coalescence of seismicity before large earthquakes in California. Oral Presentation at 2020 SCEC Annual Meeting.
- 10230 Ulrich, T., & Gabriel, A. (2020, 08). Scale-dependent fault roughness effects on earthquake dynamics and ground-motion. Poster Presentation at 2020 SCEC Annual Meeting.
- 10231 Mousavi, S. (2020, 08). The Future is Now for AI in Earthquake Monitoring. Oral Presentation at 2020 SCEC Annual Meeting.
- 10232 Segou, M. (2020, 08). Improving stress-based forecasts. Oral Presentation at 2020 SCEC Annual Meeting.
- 10235 McLaskey, G. C. (2020, 08). Earthquake initiation and foreshocks informed by 3-meter rock experiments . Oral Presentation at 2020 SCEC Annual Meeting.
- 10237 Sleep, N. H. (2020, 08). Near-fault large-event ground motion models. Poster Presentation at 2020 SCEC Annual Meeting.
- 10244 Ellsworth, W. L. (2020, 08). Foreshock Cascade to Failure in the M 6.4 July 4, 2019 Ridgecrest, California Earthquake. Poster Presentation at 2020 SCEC Annual Meeting.
- 10245 Werner, M. J. (2020, 08). Experimental Design for Testing Hypotheses of Earthquake Precursors . Oral Presentation at 2020 SCEC Annual Meeting.
- 10248 Rollins, C. (2020, 08). Pairing geodesy and earthquake catalogs to get at seismic hazard. Oral Presentation at 2020 SCEC Annual Meeting.
- 10249 Zhu, W., & Renard, F. (2020, 08). Probing fault nucleation and propagation using dynamic microtomography experiments. Oral Presentation at 2020 SCEC Annual Meeting.
- 10253 Das, J., Arrowsmith, R., Chen, Z., Scott, T. R., Scott, C. P., & Keating, D. (2020, 08). Advancing earthquake science with robotics and AI. Oral Presentation at 2020 SCEC Annual Meeting.
- 10258 Bonilla, L. F., & Ben-Zion, Y. (2020, 08). Detailed space-time variations of shallow velocity changes from dense array data. Poster Presentation at 2020 SCEC Annual Meeting.
- 10267 Locsin, L., & Callaghan, S. (2020, 08). Software Containers and Version Control for High Performance Computing Applications. Poster Presentation at 2020 SCEC Annual Meeting.

- 10275 Hough, S. E. (2020, 08). Revisiting California's Past Great Earthquakes and Long-Term Earthquake Rate. Poster Presentation at 2020 SCEC Annual Meeting.
- 10277 Withers, K. B., Ma, S., Wang, Y., Gabriel, A., Dalguer, L. A., Ulrich, T., & Goulet, C. A. (2020, 08). Generation of Broadband Ground Motion from Dynamic Rupture Simulations: A Group Modeling Approach towards better Characterizing Seismic Hazard for Engineering Applications. Poster Presentation at 2020 SCEC Annual Meeting.
- 10280 Madugo, C. M., Thompson, S., & Kozaci, O. (2020, 08). Fault displacement hazard from the asset owner's perspective. Oral Presentation at 2020 SCEC Annual Meeting.
- 10285 Barbot, S. D., & Wang, L. (2020, 08). Excitation of San Andreas tremors by thermal instabilities below the seismogenic zone. Poster Presentation at 2020 SCEC Annual Meeting.
- 10286 Fayaz, J., Rezaeian, S., & Zareian, F. (2020, 08). Critical assessment of probabilistic seismic demand analysis of ordinary bridge structures using Cybershake simulations. Poster Presentation at 2020 SCEC Annual Meeting.
- 10290 Saha, S., Moon, S., Rockwell, T. K., Scharer, K. M., & Brown, N. D. (2020, 08). Reconstructing long-term subsidence and paleoseismic history of the ancient Lake Cahuilla along the southern San Andreas fault in Coachella, California. Poster Presentation at 2020 SCEC Annual Meeting.
- 10291 Hirakawa, E. T., & Aagaard, B. T. (2020, 08). Updating the USGS San Francisco Bay Area 3D Seismic Velocity Model: Special Focus on the North Bay. Poster Presentation at 2020 SCEC Annual Meeting.
- 10294 Harris, R. A., Barall, M., Ponce, D. A., Moore, D. E., Graymer, R. W., Lockner, D. A., Morrow, C., Funning, G. J., & Eberhart-Phillips, D. (2020, 08). Dynamic Rupture Scenarios of Large Earthquakes on the Rodgers Creek-Hayward-Calaveras-Northern Calaveras Fault System, California. Poster Presentation at 2020 SCEC Annual Meeting.
- 10305 Kilb, D., Bunn, J., Saunders, J. K., Cochran, E. S., Minson, S. E., Baltay, A. S., & O'Rourke, C. (2020, 08). The Plum Earthquake Early Warning Algorithm: A Case Study of Two West Coast, USA, Datasets. Poster Presentation at 2020 SCEC Annual Meeting.
- 10311 Kindred, C. A., Griffith, W. A., & Rockwell, T. K. (2020, 08). Role of confinement in coseismic pulverization of sediments: testing the rock record of rupture directivity on the San Jacinto fault . Poster Presentation at 2020 SCEC Annual Meeting.
- 10315 Maechling, P. J., Su, M., Hearn, E. H., Marshall, S. T., Plesch, A., Shaw, J. H., Oskin, M. E., Montesi, L. G., Pauk, E., Huynh, T. T., & Ben-Zion, Y. (2020, 08). Developing Web-based Visualization and Query Tools for the SCEC CVM, CFM, GFM, and CTM Community Models. Poster Presentation at 2020 SCEC Annual Meeting.
- 10316 Shcherbakov, R. (2020, 08). Bayesian Framework for Aftershock Forecasting and Testing. Poster Presentation at 2020 SCEC Annual Meeting.
- 10320 Bolotskaya, E., & Hager, B. H. (2020, 08). Numerical simulations of dynamic earthquake rupture with different failure laws. Poster Presentation at 2020 SCEC Annual Meeting.
- 10321 Beauce, E., Campillo, M., & van der Hilst, R. (2020, 08). Small Magnitude Seismicity Helps Identify Transient Signals of Fault Creep on the North Anatolian Fault in Noisy GPS Recordings. Poster Presentation at 2020 SCEC Annual Meeting.
- 10323 Tsuchiyama, A., Taira, T., Nakajima, J., & Bürgmann, R. (2020, 08). Spatio-temporal variations of low-frequency aftershocks of the 2019 Ridgecrest earthquake sequence. Poster Presentation at 2020 SCEC Annual Meeting.
- 10325 J Rastin, S., Rhoades, D. A., & Christophersen, A. (2020, 08). The Effect of Catalog Lead Time on Earthquake Forecasting Using the EEPAS Model. Poster Presentation at 2020 SCEC Annual Meeting.
- 10331 Langer, L., Beller, S., & Tromp, J. (2020, 08). Impact of 3D Elastic Structure on Coseismic Green's Functions for Static Slip Inversion. Poster Presentation at 2020 SCEC Annual Meeting.

- 10341 Savran, W. H. (2020, 08). Pseudoprospective Evaluation of UCERF3-ETAS Forecasts during the 2019 Ridgecrest Sequence. Oral Presentation at 2020 SCEC Annual Meeting.
- 10342 Savran, W. H., Khawaja, A. M., Werner, M. J., Maechling, P. J., Rhoades, D. A., Jackson, D. D., Schorlemmer, D., Jordan, T. H., & Ben-Zion, Y. (2020, 08). PyCSEP: An Open-Source Toolkit for Evaluating Earthquake Forecast Models . Poster Presentation at 2020 SCEC Annual Meeting.
- 10344 Juarez, A., & Ben-Zion, Y. (2020, 08). Effects of Shallow-Velocity Reductions on 3D Propagation of Seismic Waves . Poster Presentation at 2020 SCEC Annual Meeting.
- 10352 Aagaard, B. T. (2020, 08). Geomodelgrids: A storage scheme and API for multiscale Earth models. Poster Presentation at 2020 SCEC Annual Meeting.
- 10356 Okubo, K., & Denolle, M. A. (2020, 08). Monitoring seismic velocity changes in 18 years at Parkfield using ambient seismic noise. Poster Presentation at 2020 SCEC Annual Meeting.
- 10358 Li, X., & Zhu, H. (2020, 08). Moment tensor inversion for deep earthquakes at the Tonga-Kermadec subduction zone using 3-D Green's functions. Poster Presentation at 2020 SCEC Annual Meeting.
- 10361 Im, K., Avouac, J., Heimisson, E. R., & Elsworth, D. (2020, 08). Investigating the role of thermo-poro-elastic stresses and deformation on induced seismicity . Poster Presentation at 2020 SCEC Annual Meeting.
- 10365 Almquist, M., & Dunham, E. M. (2020, 08). Viscoelastic earthquake sequence simulations in complex geometries. Poster Presentation at 2020 SCEC Annual Meeting.
- 10366 Tratt, D. M., Keim, E. R., Buckland, K. N., Johnson, P. D., & Leifer, I. (2020, 08). Airborne Thermal-Infrared Spectral Survey of the 2019 Ridgecrest Earthquake Zone and Environs. Poster Presentation at 2020 SCEC Annual Meeting.
- 10374 Wang, X., Cheng, Y., Zhan, Z., & Ben-Zion, Y. (2020, 08). Isotropic source components of events in the 2019 Ridgecrest earthquake sequence. Poster Presentation at 2020 SCEC Annual Meeting.
- 10370 MATSUBARA, M., Yano, T. E., & Sato, H. (2020, 08). Lower limit of seismogenic zone beneath Japan based on hypocenter catalog determined with 3D seismic velocity structure. Poster Presentation at 2020 SCEC Annual Meeting.
- 10381 Sangha, S. S., Bekaert, D. P., & Funning, G. J. (2020, 08). Comprehensive InSAR analysis using ARIA standard products captures earthquake cycle processes across California. Poster Presentation at 2020 SCEC Annual Meeting.
- 10385 Krishnan, S., & Mourhatch, R. (2020, 08). Performance Quantification of Tall Steel Braced Frame Buildings Using Rupture-To-Rafters Simulations. Poster Presentation at 2020 SCEC Annual Meeting.
- 10391 Castellanos, J. A., & Clayton, R. W. (2020, 08). A method for jointly measuring multi-mode surface wave phase velocities from one-component dense seismic arrays: A case study in Long Beach, California. Poster Presentation at 2020 SCEC Annual Meeting.
- 10394 Bayless, J., & Stewart, J. P. (2020, 08). Region-specific Fourier-based site amplification modeling. Poster Presentation at 2020 SCEC Annual Meeting.
- 10400 Cochran, E. S., Skoumal, R., McPhillips, D., Ross, Z. E., & Keranen, K. M. (2020, 08). Varied Fault Orientations in a Uniform Stress Field: The 2011 M5.7 Prague Earthquake Sequence. Poster Presentation at 2020 SCEC Annual Meeting.
- 10401 Skoumal, R., Cochran, E. S., Kroll, K., Rubinstein, J. L., & McPhillips, D. (2020, 08). Characterizing Stress Orientations in Southern Kansas. Poster Presentation at 2020 SCEC Annual Meeting.
- 10403 Luo, B., Zhu, H., & Yang, J. (2020, 08). Detection and location of aftershocks of the 2020 Western Idaho earthquake using neural networks. Poster Presentation at 2020 SCEC Annual Meeting.

- 10404 van der Elst, N. J. (2020, 08). Measuring robust b-values from magnitude differences. Poster Presentation at 2020 SCEC Annual Meeting.
- 10405 Graves, R. W., & Pitarka, A. (2020, 08). 3D Simulation of Near Fault Ground Motions for the 2019 M7.1 Ridgecrest, CA Earthquake. Poster Presentation at 2020 SCEC Annual Meeting.
- 10407 Evans, J. P., Crouch, K., & Studnický, C. (2020, 08). Composition and structure in the upper 2-4 km of major strike-slip faults. Poster Presentation at 2020 SCEC Annual Meeting.
- 10412 Nicholson, C., Plesch, A., Sorlien, C. C., Shaw, J. H., & Hauksson, E. (2020, 08). Updates, Evaluation and Improvements to the Community Fault Model (CFM version 5.3). Poster Presentation at 2020 SCEC Annual Meeting.
- 10413 Villa, V., Clayton, R. W., & Persaud, P. (2020, 08). Using Seismic and Gravity Measurements to Map the 3D Structure of the San Gabriel and San Bernardino Basins. Poster Presentation at 2020 SCEC Annual Meeting.
- 10389 Don, J., Shaw, J. H., Nicolae, A., Sorlien, C. C., Nicholson, C., & Behl, R. J. (2020, 08). Late Pleistocene slip rate and 3D geometry of the Mid-Channel blind thrust, Santa Barbara Channel, CA, and their implications for earthquake hazards. Poster Presentation at 2020 SCEC Annual Meeting.
- 10423 Wang, K., & Bürgmann, R. (2020, 08). Modeling of postseismic deformation following the 2019 Ridgecrest earthquake sequence. Poster Presentation at 2020 SCEC Annual Meeting.
- 10424 Seylabi, E., Pitarka, A., & McCallen, D. B. (2020, 08). Toward development of physics-based coherency models using deterministic broad-band earthquake ground motion simulations. Poster Presentation at 2020 SCEC Annual Meeting.
- 10426 Smith, Z. D., & Griffith, W. A. (2020, 08). The influence of lithology and preexisting damage on brittle fragmentation during dynamic tensile loading. Poster Presentation at 2020 SCEC Annual Meeting.
- 10428 Tung, S., Shirzaei, M., & Masterlark, T. (2020, 08). Integrated fault mesh of Southern California in finite element models of structural geometric complexities, crustal heterogeneity, and topography. Poster Presentation at 2020 SCEC Annual Meeting.
- 10434 Rubinstein, J. L., & Ellsworth, W. L. (2020, 08). Repeating Earthquakes Trigger Themselves. Poster Presentation at 2020 SCEC Annual Meeting.
- 10436 Onderdonk, N. W., Kerr, D. D., & Figueiredo, P. M. (2020, 08). Geomorphic and paleoseismic trenching evidence that the Glen Helen fault has not experienced surface rupture in the past 2000 years, and implications for slip transfer between the San Andreas and San Jacinto fault zones. . Poster Presentation at 2020 SCEC Annual Meeting.
- 10433 Nguyen, T., Lee, R. L., Bradley, B. A., & Graves, R. W. (2020, 08). Full Waveform Seismic Tomography for geophysical velocity model in South Island region, New Zealand based on Adjoint-Wavefield method. Poster Presentation at 2020 SCEC Annual Meeting.
- 10440 Kelty, C., & Onderdonk, N. W. (2020, 08). Episodic Deformation Along a Blind Thrust in the Past 125 Kyr: The Santa Ynez River fault in the western Transverse Ranges of California. Poster Presentation at 2020 SCEC Annual Meeting.
- 10444 Veveakis, M., & Rattetz, H. (2020, 08). Weak phases production and heat generation control fault friction during seismic slip. Poster Presentation at 2020 SCEC Annual Meeting.
- 10443 Zhang, S., Luo, B., & Zhu, H. (2020, 08). Building a new catalog for induced earthquakes in Oklahoma based on a 3-D velocity model. Poster Presentation at 2020 SCEC Annual Meeting.
- 10445 Park, S., Shin, C., Kim, Y., & Clayton, R. W. (2020, 08). Physical Velocity Models for Southern California by 3D Printing. Poster Presentation at 2020 SCEC Annual Meeting.
- 10446 Zhuang, J. (2020, 08). An ETAS model incorporated with focal mechanisms. Poster Presentation at 2020 SCEC Annual Meeting.

- 10448 Ogata, Y., & Omi, T. (2020, 08). Statistical monitoring and early forecasting of earthquake sequence: Case studies after the 2019 M6.4 Searles Valley Earthquake, California. Poster Presentation at 2020 SCEC Annual Meeting.
- 10449 Chow, B. H., Kaneko, Y., Tape, C., Modrak, R., & Townend, J. (2020, 08). An automated workflow for adjoint tomography applied to the North Island, New Zealand. Poster Presentation at 2020 SCEC Annual Meeting.
- 10454 Azar, S., & Dabaghi, M. (2020, 08). Implementation of Monte-Carlo earthquake catalogs in probabilistic seismic hazard analysis: An application to CyberShake. Poster Presentation at 2020 SCEC Annual Meeting.
- 10455 Zhan, Z., Li, Z., Shen, Z., Yang, Y., Williams, E. F., Wang, X., Muir, J. B., Klesh, A., & Karrenbach, M. (2020, 08). A rapid response Distributed Acoustic Sensing (DAS) array after the 2019 Ridgecrest earthquakes. Oral Presentation at 2020 SCEC Annual Meeting.
- 10456 O'Kane, A., & Copley, A. (2020, 08). The effects of basin and source geometry on earthquake ground motions in foreland-basin settings. Poster Presentation at 2020 SCEC Annual Meeting.
- 10458 Cheng, G., & Barnhart, W. D. (2020, 08). Permanent Co-seismic Deformation of the 2013 Mw7.7 Baluchistan, Pakistan Earthquake from High-resolution Surface Strain Analysis. Poster Presentation at 2020 SCEC Annual Meeting.
- 10461 Pitarka, A., & Graves, R. W. (2020, 08). Understanding Crustal Weak Zone Effects on Earthquake Rupture Kinematics Through Dynamic Rupture Modeling. Poster Presentation at 2020 SCEC Annual Meeting.
- 10462 Schulte-Pelkum, V., Li, S., Barnhart, W. D., & Karplus, M. (2020, 08). Anisotropic strength of fault zones suggested from geodesy and seismic imaging: Example from the Main Himalayan Thrust. Poster Presentation at 2020 SCEC Annual Meeting.
- 10463 Callaghan, S., Maechling, P. J., Goulet, C. A., Milner, K. R., Graves, R. W., Olsen, K. B., Silva, F., & Ben-Zion, Y. (2020, 08). Enhancing CyberShake simulations for engineering applications. Poster Presentation at 2020 SCEC Annual Meeting.
- 10464 Yu, E., Acharya, P., Bhaskaran, A., Chen, S., Andrews, J. R., Thomas, V., Ross, Z. E., Hauksson, E., & Clayton, R. W. (2020, 08). Cloud Computing and Big Data – Using the Southern California Earthquake Data Center (SCEDC) and the Southern California Seismic Network (SCSN) Products and Services for Earthquake Research. Poster Presentation at 2020 SCEC Annual Meeting.
- 10468 Lambert, V. R., & Lapusta, N. (2020, 08). Resolving simulated sequences of earthquakes and fault interactions . Poster Presentation at 2020 SCEC Annual Meeting.
- 10470 Materna, K., Barbour, A. J., Jiang, J., & Eneva, M. (2020, 08). A decade of geodetic deformation linked to fluid injection at the North Brawley Geothermal Field. Poster Presentation at 2020 SCEC Annual Meeting.
- 10475 Lapusta, N., & Lambert, V. R. (2020, 08). Relation between absolute stress levels, rupture style, and seismic radiation on mature faults. Poster Presentation at 2020 SCEC Annual Meeting.
- 10479 Silva, F., Maechling, P. J., Goulet, C. A., & Ben-Zion, Y. (2020, 08). The SCEC Broadband Platform: Open-Source Software for Strong Ground Motion Simulation and Validation. Poster Presentation at 2020 SCEC Annual Meeting.
- 10480 Armstrong, E. M., Ault, A. K., Bradbury, K. K., Savage, H. M., & Polissar, P. J. (2020, 08). Creating a multi-proxy approach to robustly capture earthquake temperature rise at the Punchbowl fault. Poster Presentation at 2020 SCEC Annual Meeting.
- 10482 Muir, J. B., Clayton, R. W., & Tsai, V. C. (2020, 08). A Level-Set Approach to Parsimoniously Updating the SCEC CVMs. Poster Presentation at 2020 SCEC Annual Meeting.
- 10481 Donnellan, A., Goulet, C. A., Meng, X., Lyzenga, G. A., McPhillips, D., & Devine, S. C. (2020, 08). Database Development for the Trona Pinnacles Fragile Geologic Features. Poster Presentation at 2020 SCEC Annual Meeting.

- 10484 Anderson, J. G., Haendel, A., Pilz, M., & Cotton, F. (2020, 08). A new model to explain the frequency-dependent decay of Fourier acceleration spectra at high frequencies. Poster Presentation at 2020 SCEC Annual Meeting.
- 10485 Wang, Y., & Goulet, C. A. (2020, 08). Validate simulated fault displacements from dynamic rupture against the observed in the 1992 Landers earthquake . Poster Presentation at 2020 SCEC Annual Meeting.
- 10489 Elliott, A. J., Dee, S., Koehler, R. D., Barnhart, W. D., Briggs, R., Collett, C., Dawson, T., DeLong, S., Gold, R. D., Haddon, E. K., Hartsorn, E., Hatem, A. E., Milliner, C., Pickering, A., Pierce, I., Seitz, G. G., Trexler, C., Wicks, C., Xu, X., & Zachariassen, J. (2020, 08). Comparison of ground-based and space-based surface rupture mapping of the May 15, 2020 M6.5 Monte Cristo Range earthquake, Nevada. Poster Presentation at 2020 SCEC Annual Meeting.
- 10493 Louie, J. N., Simpson, A. R., & Ortega, J. (2020, 08). Database of geotechnical shear-wave seismic-velocity profile measurements for California and Nevada. Poster Presentation at 2020 SCEC Annual Meeting.
- 10499 Yang, Y., Williams, E. F., Muir, J. B., & Zhan, Z. (2020, 08). The Potential of DAS in Seismic Hazard Analysis: A Case Study of Ridgecrest City DAS Array. Poster Presentation at 2020 SCEC Annual Meeting.
- 10496 Lau, W., & Oskin, M. E. (2020, 08). Statistical Analysis of Paleoseismically Determined Earthquake Recurrence. Poster Presentation at 2020 SCEC Annual Meeting.
- 10505 Meng, X., Goulet, C. A., Milner, K. R., & Callaghan, S. (2020, 08). A Nonergodic Ground Motion Model in Southern California with Spatially Varying Coefficients Using a SCEC CyberShake Dataset. Poster Presentation at 2020 SCEC Annual Meeting.
- 10506 Funning, G. J. (2020, 08). Results from the geodetic response to the 2019 Ridgecrest earthquakes. Oral Presentation at 2020 SCEC Annual Meeting.
- 10507 Meng, H., Ben-Zion, Y., & Johnson, C. W. (2020, 08). Analysis of seismic signals generated by vehicle traffic with application to derivation of subsurface Q values. Poster Presentation at 2020 SCEC Annual Meeting.
- 10511 Yeh, T., & Olsen, K. B. (2020, 08). 3D wave propagation simulations of the 2019 M7.1 Ridgecrest, CA, Earthquake. Poster Presentation at 2020 SCEC Annual Meeting.
- 10522 ZHOU, Y., ZHOU, S., Yue, P., Zhao, L., YANG, Z., & YAO, Y. (2020, 08). Weak Off-fault Structures Revealed by Microseismicity along Xiaojiang Fault Zone (China) and Their Implications for Seismic Hazard Assessment. Poster Presentation at 2020 SCEC Annual Meeting.
- 10526 Zhang, S., Zhang, Y., Zhuang, J., & Wu, Z. (2020, 08). Study on the background and triggering seismicity in Yutian, Xinjiang, China region. Poster Presentation at 2020 SCEC Annual Meeting.
- 10528 Phillips, N. J., Rowe, C. D., Ujiie, K., French, M. E., Belzer, B., & Motohashi, G. (2020, 08). The source of shallow slow earthquakes: Insights from field observations and experiments on an exhumed subduction mélange. Poster Presentation at 2020 SCEC Annual Meeting.
- 10478 Clements, T., Schmitt, J. F., & Denolle, M. A. (2020, 08). Cloud-Native Analysis of Southern California Waveform Data . Poster Presentation at 2020 SCEC Annual Meeting.
- 10519 Gittins, D. B., & Hawthorne, J. C. (2020, 08). Detecting creep event propagation along the San Andreas Fault. Poster Presentation at 2020 SCEC Annual Meeting.
- 10532 Pham, D. D., Methvin, M. R., & Kyriakopoulos, C. (2020, 08). A Virtual Reality Experience of the California Faults. Poster Presentation at 2020 SCEC Annual Meeting.
- 10539 Wang, W., & Vidale, J. E. (2020, 08). Study of fault zone damage and healing in the 2019 Ridgecrest aftershock sequence. Poster Presentation at 2020 SCEC Annual Meeting.
- 10546 Page, M. T. (2020, 08). Aftershocks Preferentially Occur in Previously Active Areas. Poster Presentation at 2020 SCEC Annual Meeting.

- 10545 Wang, N., Olsen, K. B., & Day, S. M. (2020, 08). A frequency-dependent spatial correlation model of within-event residuals for Fourier amplitude spectra. Poster Presentation at 2020 SCEC Annual Meeting.
- 10547 Plesch, A., Marshall, S. T., Nicholson, C., Shaw, J. H., Maechling, P. J., & Su, M. (2020, 08). The Community Fault Model version 5.3 and new web-based tools. Poster Presentation at 2020 SCEC Annual Meeting.
- 10551 Milliner, C., Avouac, J., Chen, R., Aati, S., Chiou, B., Donnellan, A., Dawson, T., & Dolan, J. F. (2020, 08). Development of a Geodetic-based Probabilistic Fault Displacement Hazard Analysis Using Near-field Geodetic Imaging Data. Poster Presentation at 2020 SCEC Annual Meeting.
- 10550 Nevitt, J. M., Brooks, B. A., Hardebeck, J. L., & Aagaard, B. T. (2020, 08). Slip distribution controlled by inherited fault geometry during the 2019 M7.1 Ridgecrest earthquake. Poster Presentation at 2020 SCEC Annual Meeting.
- 10553 Marino, S., Rodriguez Padilla, A., & Oskin, M. E. (2020, 08). Analysis of fault-tip structures at seismogenic and creeping faults. Poster Presentation at 2020 SCEC Annual Meeting.
- 10557 Vazquez, L., & Jordan, T. H. (2020, 08). Assimilating Multicycle Rupture Simulations into Probabilistic Forecasting Models. Poster Presentation at 2020 SCEC Annual Meeting.
- 10559 Rivera, K. M., Persaud, P., Clayton, R. W., Ghose, R., & Ajala, R. (2020, 08). Crustal Structure Along a Nodal Seismic Line in the San Bernardino Basin From Teleseismic Receiver Functions. Poster Presentation at 2020 SCEC Annual Meeting.
- 10560 Biasi, G. P., & Bookstein, F. (2020, 08). Maximum Entropy Modeling of Earthquake Recurrence from Paleoseismic Event Time Series. Poster Presentation at 2020 SCEC Annual Meeting.
- 10562 Williams, E. F., Heaton, T. H., Lambert, V. R., & Zhan, Z. (2020, 08). Structural healing of Millikan Library over 20 years of continuous seismic monitoring. Poster Presentation at 2020 SCEC Annual Meeting.
- 10554 Montesi, L. G., Hirth, G., Behn, M., Shinevar, W., & Oskin, M. E. (2020, 08). Shear zone rheology: Importance or fabric in the context of the CRM. Poster Presentation at 2020 SCEC Annual Meeting.
- 10563 Xu, X., Sandwell, D. T., Ward, L. A., Smith-Konter, B. R., Milliner, C., Fang, P., & Bock, Y. (2020, 08). Surface deformation nearby the Ridgecrest earthquakes: Frictional slip or compliant fault?. Poster Presentation at 2020 SCEC Annual Meeting.
- 10564 DiMonte, A. A., Ault, A. K., Bradbury, K. K., & Hirth, G. (2020, 08). Evidence for slow slip in Mecca Hills, CA, from microstructural and (U-Th)/He analysis of heterogeneous hematite coatings on shallow fault surfaces. Poster Presentation at 2020 SCEC Annual Meeting.
- 10565 Ruhl, C. J., & Abercrombie, R. E. (2020, 08). Systematic Fault Plane Analysis in Complex Earthquake Sequences: Application to the 2019 Ridgecrest, CA and 2008 Mogul, NV Earthquakes. Poster Presentation at 2020 SCEC Annual Meeting.
- 10569 Salditch, L., Gallahue, M., Lucas, M. C., Neely, J. S., Stein, S., & Hough, S. E. (2020, 08). Using historical intensity data to assess hazard map performance in California and beyond. Poster Presentation at 2020 SCEC Annual Meeting.
- 10573 Hiscock, A. I., Kleber, E. J., McDonald, G., Giraud, R., Erickson, B., Castleton, J., Bowman, S., Douglass, G., & McKean, A. (2020, 08). Geologic Effects of the March 2020 M 5.7 Magna, Utah, Earthquake. Poster Presentation at 2020 SCEC Annual Meeting.
- 10576 McPhillips, D. (2020, 08). NEW 10BE SURFACE EXPOSURE AGES AND FAULT SLIP RATES, CUCAMONGA FAULT, SOUTHERN CALIFORNIA. Poster Presentation at 2020 SCEC Annual Meeting.
- 10575 Grant Ludwig, L., Mirkhanian, M. A., Donnellan, A., & Parker, J. W. (2020, 08). Expanding the GeoGateway Science User Community. Poster Presentation at 2020 SCEC Annual Meeting.

- 10579 Schmitt, J. F., Clements, T., Wang, N., Olsen, K. B., & Denolle, M. A. (2020, 08). Ground motion prediction using ambient seismic noise on a large-N array in the LA basin. Poster Presentation at 2020 SCEC Annual Meeting.
- 10578 Rodriguez Padilla, A. M., Oskin, M. E., & Milliner, C. (2020, 08). Does Slip Heterogeneity Drive Near-field Fracture and Aftershock Distribution? Examples from the 2019 Ridgecrest Sequence. Poster Presentation at 2020 SCEC Annual Meeting.
- 10584 Magana, J. A., Dreger, D. S., & Taira, T. (2020, 08). Finite source modeling of the 2019 Ridgecrest aftershock sequence. Poster Presentation at 2020 SCEC Annual Meeting.
- 10585 Olsen, K. B., & Roten, D. (2020, 08). Deep Learning for Site Response Estimation from Geotechnical Array Data. Poster Presentation at 2020 SCEC Annual Meeting.
- 10586 Qin, Y., Chen, X., & Chen, T. (2020, 08). Diverse stress state evolutions of induced earthquake sequences in Oklahoma revealed through high resolution focal mechanism solutions. Poster Presentation at 2020 SCEC Annual Meeting.
- 10588 Morton, E., Ruhl, C. J., Smith, K., Bormann, J. M., Hatch, R. L., & Ichinose, G. A. (2020, 08). The 2020 M6.5 Monte Cristo Range, NV Earthquake and Aftershock Sequence. Poster Presentation at 2020 SCEC Annual Meeting.
- 10590 Shaddox, H. R., Schwartz, S. Y., & Bartlow, N. M. (2020, 08). Triggered and Spontaneous Slow Slip Transients on the Anza Segment of the San Jacinto Fault Zone, Southern California. Poster Presentation at 2020 SCEC Annual Meeting.
- 10592 Hirao, B., Savage, H. M., & Brodsky, E. E. (2020, 08). Regional earthquakes that trigger creep on the northern central San Andreas fault. Poster Presentation at 2020 SCEC Annual Meeting.
- 10591 Saylor, C., & Rundle, J. B. (2020, 08). A forest fire model of earthquake faulting. Poster Presentation at 2020 SCEC Annual Meeting.
- 10566 Santa Maria, J. T., Vazquez, L., & Jordan, T. H. (2020, 08). Covariance Analysis of the UCERF3-TI Logic Tree. Poster Presentation at 2020 SCEC Annual Meeting.
- 10594 Ermert, L. A., & Denolle, M. A. (2020, 08). Monitoring the changing site response of the Mexico City basin. Poster Presentation at 2020 SCEC Annual Meeting.
- 10593 Erickson, B. A., Jiang, J., Barall, M., Abdelmeguid, M., Abrahams, L. S., Allison, K. L., Ampuero, J., Barbot, S. D., Cattania, C., Duan, B., Dunham, E. M., Elbanna, A. E., Fialko, Y., Harris, R. A., Idini, B., Kozdon, J. E., Lambert, V. R., Lapusta, N., Li, M., Liu, D., Liu, Y., Luo, Y., Ma, X., Pranger, C., Segall, P., Shi, P., Thakur, P., van den Ende, M., van Dinther, Y., & Wei, M. (2020, 08). Community Code Comparisons for Simulating Sequences of Earthquakes and Aseismic Slip (SEAS): Exploring Full dynamics and 3D Effects. Poster Presentation at 2020 SCEC Annual Meeting.
- 10596 Saunders, J. K., Aagaard, B. T., Baltay, A. S., & Minson, S. E. (2020, 08). Incorporating ground-motion uncertainties into earthquake early warning alert distance strategies using the July 2019 M6.4 and M7.1 Ridgecrest, California, earthquakes. Poster Presentation at 2020 SCEC Annual Meeting.
- 10597 Catchings, R. D., Goldman, M. R., White, M. C., Qiu, H., & Ben-Zion, Y. (2020, 08). Results from dense nodal-array recordings of the 2019 Ridgecrest Sequence aftershocks. Oral Presentation at 2020 SCEC Annual Meeting.
- 10600 Xiao, H., Eilon, Z., Ji, C., & Tanimoto, T. (2020, 08). COVID-19 Societal Response Captured by Seismic Noise in China and Italy. Poster Presentation at 2020 SCEC Annual Meeting.
- 10599 Li, Y., Clayton, R. W., & Persaud, P. (2020, 08). Scattering in the Ambient Noise Correlations in the San Gabriel Basin. Poster Presentation at 2020 SCEC Annual Meeting.
- 10571 Devine, S. C., Meng, X., Goulet, C. A., Donnellan, A., McPhillips, D., & Lyzenga, G. A. (2020, 08). Developing a Database for the Fragile Geologic Features at the Trona Pinnacles National Monument. Poster Presentation at 2020 SCEC Annual Meeting.

- 10602 Bormann, J. M., Morton, E., Smith, K., Kent, G. M., Honjas, W., & Plank, G. (2020, 08). The Nevada Seismological Laboratory's 2020 M6.5 Monte Cristo Range, Nevada earthquake sequence rapid seismic deployment and data availability. Poster Presentation at 2020 SCEC Annual Meeting.
- 10607 Dal Zilio, L., Lapusta, N., & Avouac, J. (2020, 08). Unraveling scaling properties of slow slip events in 3D simulations of fault slip. Poster Presentation at 2020 SCEC Annual Meeting.
- 10606 Hearn, E. H., Oskin, M. E., Hirth, G., Montesi, L. G., Thatcher, W. R., Behr, W. M., & Pauk, E. (2020, 08). The SCEC Community Rheology Model (CRM) . Poster Presentation at 2020 SCEC Annual Meeting.
- 10608 Larochelle, S., Lapusta, N., Ampuero, J., & Cappa, F. (2020, 08). Slip response to fluid depressurization constrains fault friction. Poster Presentation at 2020 SCEC Annual Meeting.
- 10609 Hu, Z., & Olsen, K. B. (2020, 08). 3D 0-5 Hz Wave Propagation Simulations of the 2014 Mw5.1 La Habra Earthquake with Small-scale Heterogeneities, $Q(f)$ and topography. Poster Presentation at 2020 SCEC Annual Meeting.
- 10610 Toghramadjian, N., Plesch, A., Sabharwal, I., & Shaw, J. H. (2020, 08). New Perspectives on Newport-Inglewood Fault Geometry. Poster Presentation at 2020 SCEC Annual Meeting.
- 10612 Aguilar, B. J., Persaud, P., & Clayton, R. W. (2020, 08). Identifying the Moho and an intracrustal interface along a Nodal Seismic Line in the eastern San Bernardino Basin. Poster Presentation at 2020 SCEC Annual Meeting.
- 10614 Smith, D. E., McGuire, J. J., Chung, A. I., Andrews, J. R., Meier, M., & Böse, M. (2020, 08). ShakeAlert EEW System Improvements, Recent and Upcoming, Tested by the STP Working Group and the SP Working Group. Poster Presentation at 2020 SCEC Annual Meeting.
- 10618 Jia, Z., & Clayton, R. W. (2020, 08). Determination of Near Surface Shear-Wave Velocities in the Central Los Angeles Basin with Dense Arrays. Poster Presentation at 2020 SCEC Annual Meeting.
- 10623 Tamhidi, A., Kuehn, N. M., Kohler, M. D., Ghahari, F., Taciroglu, E., & Bozorgnia, Y. (2020, 08). Ground-Motion Time-Series Interpolation within the Community Seismic Network using Gaussian Process Regression: Application to the 2019 Ridgecrest Earthquake. Poster Presentation at 2020 SCEC Annual Meeting.
- 10615 Birkel, B., Vidale, J. E., Juarez, A., & Jordan, T. H. (2020, 08). Comparison of ground motions in earthquakes with SCEC CVM predictions. Poster Presentation at 2020 SCEC Annual Meeting.
- 10624 Zuckerman, M. G., Amos, C. B., Madugo, C. M., Elliott, A. J., Kottke, A. R., Goulet, C. A., Meng, X., & Caplan-Auerbach, J. (2020, 08). Displaced rocks as an indicator of ground motion during the 4 July 2019 M6.4 Ridgecrest earthquake. Poster Presentation at 2020 SCEC Annual Meeting.
- 10627 Rekoske, J., Moschetti, M. P., & Thompson, E. M. (2020, 08). Basin and Site Effects in the U.S. Pacific Northwest Estimated from Small-Magnitude Earthquakes. Poster Presentation at 2020 SCEC Annual Meeting.
- 10628 Bird, P., & Ingersoll, R. V. (2020, 08). Restoring California, part I: 0-18 Ma. Poster Presentation at 2020 SCEC Annual Meeting.
- 10630 Milner, K. R., Shaw, B. E., & Jordan, T. H. (2020, 08). Multi-fault rupture plausibility inferences from a deterministic earthquake simulator. Poster Presentation at 2020 SCEC Annual Meeting.
- 10577 Wagner, M. H., & Jordan, F. F. (2020, 08). San Bernardino County Emergency Response to July 4th-5th Trona-Ridgecrest Earthquake Complex. Poster Presentation at 2020 SCEC Annual Meeting.
- 10634 Legg, M. R., & Kamerling, M. J. (2020, 08). Oblique-rifting and evolution of southern California fault systems. Poster Presentation at 2020 SCEC Annual Meeting.
- 10638 Filippitzis, F., Kohler, M. D., Heaton, T. H., Graves, R. W., Clayton, R. W., Guy, R., Bunn, J., & Chandy, K. (2020, 08). Ground Motion Response Study of Urban Los Angeles following the 2019 Ridgecrest Earthquake Sequence. Poster Presentation at 2020 SCEC Annual Meeting.

- 10632 Liu, X., Beroza, G. C., & Ben-Zion, Y. (2020, 08). Ambient noise attenuation tomography of Love & Rayleigh waves applied to the Ramona reservation linear array across the San Jacinto Fault Zone. Poster Presentation at 2020 SCEC Annual Meeting.
- 10639 Luttrell, K. M., & Hardebeck, J. L. (2020, 08). Reconciling crustal stress heterogeneity from borehole breakouts and earthquake focal mechanisms. Poster Presentation at 2020 SCEC Annual Meeting.
- 10640 Hu, X., Bürgmann, R., Xue, L., Fu, Y., & Wang, T. (2020, 08). Interplay between seismicity and hydrological and industrial processes in Salt Lake Valley, Utah. Poster Presentation at 2020 SCEC Annual Meeting.
- 10641 Xie, Y., Meng, L., & Bao, H. (2020, 08). Rupture process of the 2019 M 6.4 and M 7.1 Ridgecrest earthquakes imaged with local and teleseismic back-projections. Poster Presentation at 2020 SCEC Annual Meeting.
- 10642 Li, C., Peng, Z., Yao, D., & Meng, X. (2020, 08). Temporal Changes of Seismicity in Salton Sea Geothermal Field with Waveform-matched Catalog. Poster Presentation at 2020 SCEC Annual Meeting.
- 10643 Burgette, R. J., Reed, M. P., Lifton, N., Scharer, K. M., McPhillips, D., & Sholdt, R. (2020, 08). Resolving the late Quaternary slip rate of the Santa Susana fault with in situ cosmogenic ³⁶Cl profile dating. Poster Presentation at 2020 SCEC Annual Meeting.
- 10645 Ji, C., & Archuleta, R. J. (2020, 08). Refinements of UCSB Method Using a Double-Corner Frequency Source Spectrum . Poster Presentation at 2020 SCEC Annual Meeting.
- 10644 Espindola-Mercado, A., Ferrick, A. L., & Meade, B. J. (2020, 08). Exploratory visualization and analysis of high resolution GPS data across California. Poster Presentation at 2020 SCEC Annual Meeting.
- 10647 Gonzalez-Huizar, H., & Douilly, R. (2020, 08). Investigating the Role of Seismic Waves on Multi-fault Rupturing. Poster Presentation at 2020 SCEC Annual Meeting.
- 10650 Ueda, T., Kato, A., Ogata, Y., & Yamaya, L. (2020, 08). Spatial variations in seismicity characteristics in and around the source region of the 2019 Yamagata-Oki Earthquake, Japan. Poster Presentation at 2020 SCEC Annual Meeting.
- 10653 Shan, W., Teng, Y., Zhang, S., Wang, M., & Yang, G. (2020, 08). Predicting the Magnitude and Location of Earthquake in Sichuan-Yunnan Region via a Convolutional Neural Network. Poster Presentation at 2020 SCEC Annual Meeting.
- 10652 Sarma, P., & Bhattacharya, P. (2020, 08). Role of permeability enhancement in the growth of injection induced aseismic ruptures. Poster Presentation at 2020 SCEC Annual Meeting.
- 10658 Lohman, R. B., & Jiang, J. (2020, 08). Impact of intermittent decorrelation events on InSAR time series, with application to the Salton Trough, CA. Poster Presentation at 2020 SCEC Annual Meeting.
- 10660 Ajala, R., Persaud, P., & Juarez, A. (2020, 08). Methodology for producing hybrid Earth models with improved waveform predictions near the southern San Andreas fault and updates to SCEC UCVM API. Poster Presentation at 2020 SCEC Annual Meeting.
- 10661 Glasgow, M. E., Wang, R., Schmandt, B., & Kiser, E. (2020, 08). Injection-induced seismicity in the Raton Basin from 2016-2020. Poster Presentation at 2020 SCEC Annual Meeting.
- 10662 Shearer, P. M., & Abercrombie, R. E. (2020, 08). Calibrating Spectral Decomposition of Local Earthquakes using Borehole Seismic Records---Results for the 1992 Big Bear Aftershocks in Southern California. Poster Presentation at 2020 SCEC Annual Meeting.
- 10665 Smith, J. D., Aizzadenesheli, K., & Ross, Z. E. (2020, 08). EikoNet: Solving the Eikonal equation with Deep Neural Networks, with applications to earthquake location. Poster Presentation at 2020 SCEC Annual Meeting.

- 10666 Williams, R., Rowe, C. D., Okamoto, K. K., Savage, H. M., & Eves, E. (2020, 08). HOW FAULT ROCKS FORM AND MATURE IN THE SHALLOW SAN ANDREAS FAULT. Poster Presentation at 2020 SCEC Annual Meeting.
- 10668 Floyd, M., Herring, T. A., Shen, Z., Murray, J. R., Hammond, W. C., & Murray, M. (2020, 08). Current status and future plans for the Community Geodetic Model (GNSS) products. Poster Presentation at 2020 SCEC Annual Meeting.
- 10670 De Pascale, G. P., Sandoval, F., & Hernandez, M. (2020, 08). Late-Quaternary slip rates along the plate boundary Magallanes Fault System, Patagonia. Poster Presentation at 2020 SCEC Annual Meeting.
- 10673 Baltay, A. S., & Abercrombie, R. E. (2020, 08). Stress drop and ground-motion source comparison of the July 2019 Ridgecrest earthquake sequence: A community validation study . Poster Presentation at 2020 SCEC Annual Meeting.
- 10676 Pierce, I., Koehler, R. D., Williams, A. M., Dee, S., & Seitz, G. G. (2020, 08). Characteristics of Surface Rupturing Earthquakes in the Walker Lane from Centimeter Scale Orthoimagery. Poster Presentation at 2020 SCEC Annual Meeting.
- 10674 Johnson, K. M., Dorsett, J. H., Puel, S., & Becker, T. W. (2020, 08). Using Postseismic Relaxation Test Southern California Viscosity Models. Poster Presentation at 2020 SCEC Annual Meeting.
- 10681 Roten, D., Olsen, K. B., Day, S. M., & Cui, Y. (2020, 08). Simulation of Multi-surface Plasticity in the Discontinuous-Mesh GPU-powered Wave Propagation Code AWP. Poster Presentation at 2020 SCEC Annual Meeting.
- 10685 Ladage, H., Lozos, J. C., & Akciz, S. O. (2020, 08). Modeling the Rupture Dynamics of Strong Ground Acceleration (>1g) in Fault Stepovers. Poster Presentation at 2020 SCEC Annual Meeting.
- 10672 Wang, J., & Tanimoto, T. (2020, 08). Layered Structure and Vs30 at Colocated Pressure and Seismic Stations in the Transportable Array. Poster Presentation at 2020 SCEC Annual Meeting.
- 10684 Jordan, Jr., F. F., Wagner, M. H., & Cato, K. (2020, 08). Trona-Ridgecrest Earthquake Sequence and Fault Complex, San Bernardino County. Poster Presentation at 2020 SCEC Annual Meeting.
- 10688 Share, P., Vernon, F. L., Fialko, Y., Allam, A. A., & Ben-Zion, Y. (2020, 08). Structural properties of the Southern San Andreas fault around Thousand Palms, California, from analysis of large-N seismic array data. Poster Presentation at 2020 SCEC Annual Meeting.
- 10689 Bunds, M., Scott, C. P., Lee, J., & Whitney, B. (2020, 08). High Resolution Topography along 40 km of the Southern San Andreas Fault. Poster Presentation at 2020 SCEC Annual Meeting.
- 10682 Kain, J. O., & Persaud, P. (2020, 08). Detailed study of stress-related borehole features and the stress regime near the Wilmington Blind-Thrust Fault in the Los Angeles area. Poster Presentation at 2020 SCEC Annual Meeting.
- 10671 Sui, S., & Shen, W. (2020, 08). Crustal Architecture of S. California Imaged by A 2-Layer H-K Stacking Method and Its Implications on Crustal Composition. Poster Presentation at 2020 SCEC Annual Meeting.
- 10696 Shen, Z., & Liu, Z. (2020, 08). Resolve 3-Dimensional dimensional Crustal Deformation Field using GNSS and InSAR data. Poster Presentation at 2020 SCEC Annual Meeting.
- 10698 Gabriel, A., Vyas, J. C., Ulrich, T., Ampuero, J., & Mai, M. P. (2020, 08). 3D dynamic rupture modeling with thermal pressurization. Poster Presentation at 2020 SCEC Annual Meeting.
- 10699 Florez, M. A., Caporale, M., Pakpoom, B., Ross, Z. E., Asimaki, D., & Meier, M. (2020, 08). Data-Driven Ground Motion Synthesis using Deep Generative Models. Poster Presentation at 2020 SCEC Annual Meeting.
- 10677 Elston, H. M., Cooke, M. L., Loveless, J. P., & Marshall, S. T. (2020, 08). An innovative technique combining forward and inverse approaches to resolve interseismic deep slip and locking depths on closely spaced faults. Poster Presentation at 2020 SCEC Annual Meeting.

- 10700 Golriz, D., Bock, Y., & Xu, X. (2020, 08). Distinguishing the Coseismic Phase of the Earthquake Cycle with Seismogeodesy. Poster Presentation at 2020 SCEC Annual Meeting.
- 10701 Zhou, Z., Gerstoft, P., Bianco, M., & Olsen, K. B. (2020, 08). Machine Learning-Based Tomography of the Ridgecrest Region. Poster Presentation at 2020 SCEC Annual Meeting.
- 10704 Reitman, N. G., Mueller, K. J., & Tucker, G. (2020, 08). How does climate affect the evolution of offset channels on strike-slip faults? Insights from landscape evolution models. Poster Presentation at 2020 SCEC Annual Meeting.
- 10707 Cortez, J., Oglesby, D. D., Kyriakopoulos, C., Wu, B., Ghosh, A., & Douilly, R. (2020, 08). Stress analysis and rupture dynamics of the 2019 Ridgecrest Sequence. Poster Presentation at 2020 SCEC Annual Meeting.
- 10705 Penney, C., & Avouac, J. (2020, 08). Rheological implications of post-seismic deformation following the 2019 Ridgecrest Earthquakes. Poster Presentation at 2020 SCEC Annual Meeting.
- 10709 Kanaya, T., & Zhu, W. (2020, 08). Two timescales of fault stabilization by dilatant hardening: slow slip events followed by prolonged dynamic rupture . Poster Presentation at 2020 SCEC Annual Meeting.
- 10711 Oglesby, D. D., Hu, F., Wu, B., & Chen, X. (2020, 08). Modeling and observing supershear rupture: insufficient information from the presence of a daughter crack. Poster Presentation at 2020 SCEC Annual Meeting.
- 10714 Berg, E., Lin, F., Schulte-Pelkum, V., Gkogkas, K., & Qiu, H. (2020, 08). Joint MCMC Inversion of Rayleigh Wave Phase Velocity, Ellipticity, and Receiver Functions: Southern California Shear Velocity Model Expanding to the Shallower and Deeper Crust. Poster Presentation at 2020 SCEC Annual Meeting.
- 10717 Liu, D., & Duan, B. (2020, 08). Observation-constrained multicycle dynamic models of southern San Andreas fault and the San Jacinto fault: the effect of the Big Bend and Cajon Pass on rupture dynamics. Poster Presentation at 2020 SCEC Annual Meeting.
- 10713 Tymofyeyeva, E., Sandwell, D. T., Xu, X., Liu, Z., Materna, K., Wang, K., Funning, G. J., Bekaert, D., & Floyd, M. (2020, 08). Current status and future plans for the Community Geodetic Model (InSAR) products. Poster Presentation at 2020 SCEC Annual Meeting.
- 10687 Young, E. K., Oskin, M. E., & Rodriguez Padilla, A. M. (2020, 08). Testing the Reproducibility of Remote Surface Rupture Maps of the 2019 Ridgecrest Earthquakes . Poster Presentation at 2020 SCEC Annual Meeting.
- 10718 Asimaki, D., Seylabi, E., Restrepo, D., & Taborda, R. (2020, 08). Deterministic ground motion simulations with shallow crust nonlinearity. Poster Presentation at 2020 SCEC Annual Meeting.
- 10712 Dascher-Cousineau, K., Brodsky, E. E., & Lay, T. (2020, 08). Two Foreshock Sequences Post Gulia and Wiemer (2019). Poster Presentation at 2020 SCEC Annual Meeting.
- 10558 Vadman, M., & Bemis, S. P. (2020, 08). Creep rate gradient through the locked-to-creeping transition zone measured by differential lidar on the San Andreas fault at Parkfield, CA. Poster Presentation at 2020 SCEC Annual Meeting.
- 10719 Smith, K., Hatch, R. L., Ruhl, C. J., & Abercrombie, R. E. (2020, 08). Order and timing of high-angle conjugate strike-slip faulting in Walker Lane sequences. Poster Presentation at 2020 SCEC Annual Meeting.
- 10678 Lozos, J. C. (2020, 08). Dynamic rupture modeling of coseismic interactions on orthogonal strike-slip faults. Poster Presentation at 2020 SCEC Annual Meeting.
- 10721 Wu, B., Oglesby, D. D., Kyriakopoulos, C., & Ryan, K. J. (2020, 08). How do inertia, free surface interaction, and absolute friction coefficient level affect the final slip amplitude in a theoretical thrust fault rupture model? . Poster Presentation at 2020 SCEC Annual Meeting.
- 10723 Jackson, D. D. (2020, 08). Grand challenges in earthquake science. Poster Presentation at 2020 SCEC Annual Meeting.

- 10725 Abercrombie, R. E., Trugman, D. T., Shearer, P. M., Chen, X., Zhang, J., Pennington, C. N., Hardebeck, J. L., Goebel, T. H., & Ruhl, C. J. (2020, 08). Does earthquake stress drop increase with depth? . Poster Presentation at 2020 SCEC Annual Meeting.
- 10726 Barbery, M. R., Chester, F. M., & Chester, J. S. (2020, 08). Investigation of transient and hysteretic flash-weakening behavior observed in high-speed friction experiments. Poster Presentation at 2020 SCEC Annual Meeting.
- 10727 Feng, T., & Meng, L. (2020, 08). Combining CNN and RNN in Seismic Phase Picking . Poster Presentation at 2020 SCEC Annual Meeting.
- 10710 Maurer, J. L., & Johnson, K. M. (2020, 08). Measuring uncertainty in surface strain rates in Southern California using multiple methods and elastic models.. Poster Presentation at 2020 SCEC Annual Meeting.
- 10724 Thatcher, W. R. (2020, 08). The SCEC Community Thermal Model (CTM) Version 1.2. Poster Presentation at 2020 SCEC Annual Meeting.
- 10731 Hung, R., & Weingarten, M. (2020, 08). Coseismic hydrogeologic response to the 2019 Ridgecrest Earthquake in the fault system at Devils Hole, Nevada. Poster Presentation at 2020 SCEC Annual Meeting.
- 10732 Pulver, N. W., Petrashek, S. R., Contreras, R., & Polet, J. (2020, 08). Geophysical and Geodetic Characterization of the San Andreas Oasis at The Dos Palmas Preserve. Poster Presentation at 2020 SCEC Annual Meeting.
- 10736 Sudhir, K., & Lapusta, N. (2020, 08). Nucleation of earthquake slip on heterogeneous interfaces. Poster Presentation at 2020 SCEC Annual Meeting.
- 10738 Rosas, V. G., & Baltay, A. S. (2020, 08). Analyzing Stress drops and other earthquake parameters from the 2019 Ridgecrest Earthquake Sequence. Poster Presentation at 2020 SCEC Annual Meeting.
- 10740 Ward, L. A., Smith-Konter, B. R., Xu, X., & Sandwell, D. T. (2020, 08). Vertical Deformation Dependency on Spatially Variable Elastic Plate Thickness: Insights from the 2019 Ridgecrest Earthquake Sequence. Poster Presentation at 2020 SCEC Annual Meeting.
- 10742 Hill, J. S., Cattanach, B. L., Douglas, T. J., Figueiredo, P. M., Kirby, E., Korte, D. M., Lynn, A. S., Merschat, A. J., Owen, L. A., Scheip, C., Stewart, K. G., Wells, S. B., & Wooten, R. M. (2020, 08). Surface rupture of the Little River fault in response to the August 9, 2020 Mw 5.1 earthquake near Sparta, North Carolina. Poster Presentation at 2020 SCEC Annual Meeting.
- 10750 Williams, A. M., Arrowsmith, R., & Rockwell, T. K. (2020, 08). Investigating the Earthquake Chronology of the Last Millennium along the Cholame Section of the San Andreas Fault . Poster Presentation at 2020 SCEC Annual Meeting.
- 10749 Ulloa, S., & Lozos, J. C. (2020, 08). Surface Displacement and Ground Motion from Dynamic Rupture Models of Thrust Faults with Variable Dip Angles and Burial Depths. Poster Presentation at 2020 SCEC Annual Meeting.
- 10758 Kyriakopoulos, C., Wu, B., & Oglesby, D. D. (2020, 08). The Cajon pass earthquake gate: clues from synthetic and realistic topography dynamic rupture models . Poster Presentation at 2020 SCEC Annual Meeting.
- 10756 Herrmann, M., & Marzocchi, W. (2020, 08). Inconsistencies and lurking pitfalls in the magnitude-frequency distribution of high-resolution earthquake catalogs. Poster Presentation at 2020 SCEC Annual Meeting.
- 10757 Stanciu, A., & Humphreys, E. D. (2020, 08). Seismic structure of the upper mantle across California and the offshore Borderland. Poster Presentation at 2020 SCEC Annual Meeting.
- 10753 Figueiredo, P. M., Carter, M. W., Cattanach, B., Douglas, T. J., Hill, J. S., Kirby, E., Korte, D., Lynn, A., Merschat, A., Owen, L. A., Scheip, C., Stewart, K., Wells, S. B., & Wooten, R. M. (2020, 08). Preliminary observations of Mw 5.1 Sparta (North Carolina) surface deformation – a first documented Mw

5 instrumental earthquake surface rupture in Eastern USA?. Poster Presentation at 2020 SCEC Annual Meeting.

10761 Morelan, A. E., Hudnut, K. W., & Donnellan, A. (2020, 08). Quantifying fault displacement via optical image correlation using structure-from-motion orthomosaics in the 2019 Ridgecrest earthquake sequence. Poster Presentation at 2020 SCEC Annual Meeting.

10763 Kim, J., Bahadori, A., & Holt, W. E. (2020, 08). Preseismic and Post-seismic Transient Strain Anomaly Patterns Before and After the 2019 Ridgecrest Earthquake Sequence . Poster Presentation at 2020 SCEC Annual Meeting.

10764 Prush, V. B., Oskin, M. E., & Liu, J. (2020, 08). Off-fault deformation, stress field rotation, and the mechanical conditioning for rupture through an earthquake gate along the Altyn Tagh fault, northwest China. Poster Presentation at 2020 SCEC Annual Meeting.

10766 Seitz, G. G., Williams, A. M., Cook, D. K., Rockwell, T. K., & Arrowsmith, R. (2020, 08). San Andreas Fault Transition Zone: Where Large, Small, Coseismic, and Aseismic Slip Occurs: Parkfield-Cholame. Poster Presentation at 2020 SCEC Annual Meeting.

10769 Ghose, R., Persaud, P., & Clayton, R. W. (2020, 08). Basin Structure Revealed in Teleseismic Receiver Functions from a Dense Nodal Seismic Array in the Northern Los Angeles Basins. Poster Presentation at 2020 SCEC Annual Meeting.

10771 Tymofyeyeva, E. (2020, 08). InSAR observations of accelerated shallow creep on California faults. Oral Presentation at 2020 SCEC Annual Meeting.

10733 Lin, T., Deierlein, G., Baker, J. W., & Zareian, F. (2020, 08). Guidelines on Utilization of Simulated Ground Motions for Engineering Building Response Applications. Poster Presentation at 2020 SCEC Annual Meeting.

10772 Rodgers, A. J., Pitarka, A., Pankajakshan, R., Sjogreen, B., & Petersson, A. (2020, 08). Ground Motion Simulations and Site Response Corrections for MW 7.0 Hayward Fault Earthquakes Resolved 0-10 Hz. Poster Presentation at 2020 SCEC Annual Meeting.

10773 Taufiqurrahman, T., Gabriel, A., Li, D., Ulrich, T., Wirp, S., Carena, S., Verdecchia, A., & Galovic, F. (2020, 08). Observationally constrained multi-scale dynamic rupture modeling of the 2019 Ridgecrest earthquakes. Poster Presentation at 2020 SCEC Annual Meeting.

10775 Chen, Z., Scott, T. R., Bearman, S., Anand, H., Keating, D., Scott, C. P., Arrowsmith, R., & Das, J. (2020, 08). Geomorphological Analysis Using Unpiloted Aircraft Systems, Structure from Motion, and Deep Learning. Poster Presentation at IEEE/RSJ International Conference on Intelligent Robots and Systems.

10783 Brodsky, E. E. (2020, 08). Lessons in earthquake nucleation drawn from subduction zones and ice streams. Oral Presentation at 2020 SCEC Annual Meeting.

10792 Lin, T., Deierlein, G., Zhong, K., & Yen, W. (2020, 09). SCEC Broadband Platform (BBP) ground motion simulations for tall building response analyses in San Francisco, Los Angeles downtown, and CyberShake sites. Oral Presentation at 17th World Conference on Earthquake Engineering (17WCEE).

10883 Lin, T. (2017, 06). Virtual Reality of Earthquake Ground Motions for Emergency Response. Oral Presentation at 6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering.

10937 Ji, C., & Archuleta, R. J. (2020, 03). Double corner frequency spectrum and its implications for the physics of the earthquake source. Oral Presentation at IASPEI Effects of Surface Geology.

10940 Rosakis, A. J., Rubino, V., Tal, Y., & Lapusta, N. (2020, 12). Following individual ruptures: a new approach for measuring dynamic friction in the lab. Oral Presentation at AGU Fall Meeting.

10971 Lozos, J. C. (2021, 04). Dynamic Rupture Modeling of Coseismic Interactions on Orthogonal Strike-Slip Faults. Poster Presentation at 2021 Seismological Society of America Annual Meeting.

- 11000 Alongi, T. V., Brodsky, E. E., Kluesner, J. W., & Brothers, D. S. (2019, 12). Fault Damage Zones in 3D with Active-Source Seismic Data. Poster Presentation at American Geophysical Union Fall Meeting.
- 11005 Wang, Y., & Goulet, C. A. (2021, 04). Validate simulated fault displacements from dynamic rupture against the observed in the 1992 Landers earthquake. Oral Presentation at SSA 2021 Annual Meeting.
- 11027 Lee, Y., Goulet, C. A., Hu, Z., & Eguchi, R. T. (2022, 02). Impact of CyberShake on Risk Assessments for Distributed Infrastructure Systems. Oral Presentation at ASCE Lifelines Conference 2021-2022.
- 11045 Yang, Y., & Dunham, E. M. (2021, 07). Effect of Porosity and Permeability Evolution on Injection-Induced Aseismic Slip. Poster Presentation at 2021 SCEC Annual Meeting.
- 11047 Ross, Z. E., & Cochran, E. S. (2021, 07). Evidence for Latent Crustal Fluid Injection Transients in Southern California From Long-Duration Earthquake Swarms. Poster Presentation at 2021 SCEC Annual Meeting.
- 11046 Martin, E., Kump, J., Morgan, S., Pearl, B., Artis, T., & Paulus, S. (2021, 07). Advances in passive seismic algorithms for large-scale DAS data. Oral Presentation at 2021 SCEC Annual Meeting.
- 11054 Goebel, T. H., & Shirzaei, M. (2021, 07). More than 40 years of potentially induced seismicity close to the San Andreas fault in San Ardo, central California. Poster Presentation at 2021 SCEC Annual Meeting.
- 11058 Gauriau, J., & Dolan, J. F. (2021, 07). Relative structural complexity of plate boundary fault systems controls incremental slip-rate behavior of major strike-slip faults. Poster Presentation at 2021 SCEC Annual Meeting.
- 11065 Fuis, G. S., Catchings, R. D., Goldman, M. R., Scheirer, D. S., Earney, T. E., Bauer, K., & Zhang, E. (2021, 07). New insights on subsurface fault and geologic structure at Loma Prieta, central California. Poster Presentation at 2021 SCEC Annual Meeting.
- 11069 van den Ende, M., & Ampuero, J. (2021, 07). The challenges (and solutions) of using fibre-optic cables as seismological antennas. Oral Presentation at 2021 SCEC Annual Meeting.
- 11084 Daub, E. G., Arabnejad, H., & Groen, D. (2021, 07). Uncertainty Quantification of Dynamic Rupture Modeling. Poster Presentation at 2021 SCEC Annual Meeting.
- 11094 Xu, X., Sandwell, D. T., Klein, E., & Bock, Y. (2021, 07). Strain rate mapping along the San Andreas fault system with integrated InSAR and GNSS time-series. Poster Presentation at 2021 SCEC Annual Meeting.
- 11100 Huang, Y., & Thakur, P. (2021, 07). Characteristics of earthquakes in damaged, heterogeneous, and temporally evolving fault zones. Oral Presentation at 2021 SCEC Annual Meeting.
- 11102 Douilly, R. (2021, 07). Investigating the Influence of Topography on Rupture Propagation along Fault Stepovers. Oral Presentation at 2021 SCEC Annual Meeting.
- 11105 Marschall, E. O., & Douilly, R. (2021, 07). Investigating the Effects of Fault Dip Angle on Rupture Propagation Along Branch Fault Systems Using Dynamic Rupture Simulations. Poster Presentation at 2021 SCEC Annual Meeting.
- 11109 Trugman, D. T. (2021, 07). Initial Tests of a Bayesian Framework for Directivity and Source Spectral Analysis: Application to the July 2019 Ridgecrest Earthquake Sequence. Poster Presentation at 2021 SCEC Annual Meeting.
- 11112 Xu, X., Sandwell, D. T., Ward, L. A., Milliner, C., Smith-Konter, B. R., Fang, P., & Bock, Y. (2021, 08). Mapping faults from space with InSAR: Ridgecrest and beyond. Oral Presentation at 2021 SCEC Annual Meeting.
- 11113 Hearn, E. H., Montesi, L. G., Hirth, G., Oskin, M. E., Behr, W. M., & Thatcher, W. R. (2021, 08). The SCEC Community Rheology Model: A modular resource for investigating the effective viscosity structure of southern California. Oral Presentation at 2021 SCEC Annual Meeting.

- 11115 Ulrich, T., Taufiqurrahman, T., Gabriel, A., Li, D., Li, B., Wirp, S., Carena, S., Verdecchia, A., & Gallovic, F. (2021, 08). Unraveling the mechanics of multi-fault earthquakes using realistic 3D dynamic rupture models, unifying interdisciplinary geophysical observations: the 2019 Ridgecrest sequence. Oral Presentation at 2021 SCEC Annual Meeting.
- 11117 Tinti, E., Casarotti, E., Ulrich, T., Taufiqurrahman, T., Li, D., & Gabriel, A. (2021, 08). Constraining families of dynamic models using geological, geodetic and strong ground motion data. Oral Presentation at 2021 SCEC Annual Meeting.
- 11119 Gold, R. (2021, 08). Coseismic surface rupture: insights from field and satellite observations. Oral Presentation at 2021 SCEC Annual Meeting.
- 11123 Saha, S., Moon, S., Brown, N. D., Rhodes, E. J., & McGill, S. F. (2021, 08). Potentials and challenges with single-grain luminescence dating—re-evaluating our assumptions. Oral Presentation at 2021 SCEC Annual Meeting.
- 11126 Hernandez, M. T., Rodriguez Padilla, A. M., & Oskin, M. E. (2021, 08). Damage Zone Patterns Along Creeping Faults in the Navajo Sandstone, Utah. Poster Presentation at 2021 SCEC Annual Meeting.
- 11130 Alongi, T. V., Brodsky, E. E., Kluesner, J. W., & Brothers, D. S. (2021, 08). Using Active Source Seismology to Image a Strike-Slip Fault Damage Zone as a Function of Depth, Distance, and Geology. Poster Presentation at 2021 SCEC Annual Meeting.
- 11131 Elbanna, A. E., Abdelmeguid, M., Mia, M., & Ma, X. (2021, 08). Towards modeling sequence of earthquakes and aseismic slip (SEAS) with high resolution fault zone physics. Oral Presentation at 2021 SCEC Annual Meeting.
- 11135 Milliner, C., Avouac, J., Aati, S., Chen, R., Chiou, B., Dawson, T., Donnellan, A., & Dolan, J. F. (2021, 08). Characterizing the Deformation and Hazard of Fault Zones Using Geodetic Imaging Data. Oral Presentation at 2021 SCEC Annual Meeting.
- 11136 Milliner, C., Aati, S., & Avouac, J. (2021, 08). Resolving Coseismic Stresses Using 3D Geodetic Imaging Data: Examples from the 2019 Ridgecrest Earthquake Sequence. Poster Presentation at 2021 SCEC Annual Meeting.
- 11137 Prush, V. B., & Oskin, M. E. (2021, 08). Revisiting geologic fault slip rates - and their uncertainty - across southern California. Oral Presentation at 2021 SCEC Annual Meeting.
- 11138 Luo, B., Clapp, R., Lellouch, A., Yartsev, V., Karrenbach, M., Dawe, C., & Biondi, B. (2021, 08). Distributed acoustic sensing using long range submarine fiber-optic cables. Oral Presentation at 2021 SCEC Annual Meeting.
- 11139 Allison, K. L., & Montesi, L. G. (2021, 08). Very long timescale of grain size and shear zone evolution in a continental strike-slip setting. Poster Presentation at 2021 SCEC Annual Meeting.
- 11140 Thatcher, W. R., & Chapman, D. S. (2021, 08). A Thermal Model of the Southern California: SoCal Likes It (Mostly) Hot. Oral Presentation at 2021 SCEC Annual Meeting.
- 11141 Floyd, M. (2021, 08). Current status and future of the Community Geodetic Model. Oral Presentation at 2021 SCEC Annual Meeting.
- 11142 Ault, A. K. (2021, 08). What can hematite (U-Th)/He thermochronometry tell us about fault mechanics in the shallow crust?. Oral Presentation at 2021 SCEC Annual Meeting.
- 11144 Scott, C. P., Arrowsmith, R., DeLong, S., Bunds, M. P., Toke, N. A., & Shirzaei, M. (2021, 08). Shallow Creep Along the Central San Andreas Fault from Differential Lidar Topography . Oral Presentation at 2021 SCEC Annual Meeting.
- 11146 Koirala, R., Brodsky, E., Goebel, T. H., & Kwiatak, G. (2021, 08). Induced seismicity spikes during abrupt changes in injection and production rates in geothermal reservoirs. Poster Presentation at 2021 SCEC Annual Meeting.

- 11151 Hofmann, F., Cooperdock, E., West, A., Hildebrandt, D., Strößner, K., & Farley, K. (2021, 08). Cosmogenic ^3He exposure dating of alluvial surfaces using detrital magnetite enabled by microCT scanning. Poster Presentation at 2021 SCEC Annual Meeting.
- 11152 Omojola, J. B., Persaud, P., Catchings, R. D., & Goldman, M. R. (2021, 08). Searching for Hidden Microearthquakes using Data-based, Physics-based, and Hybrid Models: Implications for Salt Dome Monitoring. Poster Presentation at 2021 SCEC Annual Meeting.
- 11153 Kindred Weigandt, C. A., Griffith, W., & Rockwell, T. K. (2021, 08). Role of Confinement in Coseismic Pulverization of Sediments: Testing the Rock Record of Rupture Directivity on the San Jacinto Fault. Poster Presentation at 2021 SCEC Annual Meeting.
- 11157 Persaud, P., & Stock, J. M. (2021, 08). Borehole-Derived Stress Constraints for High-Risk Fault Systems in Southern California. Oral Presentation at 2021 SCEC Annual Meeting.
- 11148 Buckley, W. C., Rockwell, T. K., Scharer, K. M., Gontz, A. M., Figueiredo, P. M., & Morgan, Z. A. (2021, 08). Assessment of the paleoseismic potential of the Ferrum site along the southernmost San Andreas fault using new UAV imagery, GPR data, and preliminary trenching. Poster Presentation at 2021 SCEC Annual Meeting.
- 11160 Meng, Q., Duan, B., & Luo, B. (2021, 08). Explore the mechanism of tsunami earthquake generation using earthquake cycle simulation. Poster Presentation at 2021 SCEC Annual Meeting.
- 11161 Matsuyama, S. C., & Montesi, L. G. (2021, 08). Temperature Variations at the Base of the Seismogenic Zone throughout Southern California. Poster Presentation at 2021 SCEC Annual Meeting.
- 11164 Liu, D., Duan, B., Scharer, K. M., & Yule, D. (2021, 08). Observation-constrained multicycle dynamic models of the southern San Andreas and San Jacinto faults: addressing complexity in paleoearthquake models with realistic fault geometry. Poster Presentation at 2021 SCEC Annual Meeting.
- 11163 Pennington, C. N., Chang, H., Rubinstein, J. L., Abercrombie, R. E., Nakata, N., Uchide, T., & Cochran, E. S. (2021, 08). Quantifying the Sensitivity of Microearthquake Slip Inversions to Station Distribution Using the LASSO Nodal Array in Oklahoma. Poster Presentation at 2021 SCEC Annual Meeting.
- 11168 Shelly, D. R., Skoumal, R. J., & Hardebeck, J. L. (2021, 08). Conjugate Rupture Patterns and Role of Fluids in the 2020 Maacama Fault, California Earthquake Swarm. Poster Presentation at 2021 SCEC Annual Meeting.
- 11175 Saylor, C., & Rundle, J. B. (2021, 08). Multifractal analysis of a seismic moment distribution obtained from InSAR inversion. Poster Presentation at 2021 SCEC Annual Meeting.
- 11177 Scharer, K. M., Leidelmeijer, J., Kirby, M. E., Bonuso, N., & McPhillips, D. (2021, 08). Impact of fires, earthquakes, and climate on catchment response since 600 CE, Pallett Creek, San Gabriel Mountains, California USA. Poster Presentation at 2021 SCEC Annual Meeting.
- 11180 Brown, E., & Yong, A. (2021, 08). Comparison of Depth-to-Bedrock with VS30 and Terrain Classes, Including Implications for Predicting Dominate Site Frequencies (fd). Poster Presentation at 2021 SCEC Annual Meeting.
- 11183 Turner, A. R., & Hawthorne, J. C. (2021, 08). The role of partial ruptures in the observed moment-recurrence scaling of repeating earthquakes. Poster Presentation at 2021 SCEC Annual Meeting.
- 11184 Colquhoun, R. L., & Hawthorne, J. C. (2021, 08). Using foreshocks, aftershocks and sequences to probe earthquake nucleation. Poster Presentation at 2021 SCEC Annual Meeting.
- 11187 Kilb, D., O'Rourke, C., Böse, M., Andrews, J. R., Chung, A. I., Bunn, J., & McGuire, J. J. (2021, 08). Testing Three Earthquake Early Warning Algorithms (EPIC, FinDer and PLUM) on Simulated Composite Offshore Earthquakes. Poster Presentation at 2021 SCEC Annual Meeting.
- 11193 Montesi, L. G., Hirth, G., & Oskin, M. E. (2021, 08). Predicted Ductile Rheology of Textured and Non-Textured Rocks in Southern California. Poster Presentation at 2021 SCEC Annual Meeting.

- 11194 Filippitzis, F., Kohler, M. D., Massari, A. T., Roh, B., & Heaton, T. H. (2021, 08). Spectral Scaling Transfer Function Method for Scenario Ground Motion Simulation with Application to the 2019 Ridgecrest Earthquake Sequence. Poster Presentation at 2021 SCEC Annual Meeting.
- 11196 Du, Y., Ma, S., Kubota, T., & Saito, T. (2021, 08). Impulsive Tsunami and Large Runup Along the Sanriku Coast of Japan Produced by an Inelastic Wedge Deformation Model. Poster Presentation at 2021 SCEC Annual Meeting.
- 11204 Shanker, D., & Karim, M. F. (2021, 08). Tectonic and Seismicity Characteristics of Bengal Basin System (BBS). Poster Presentation at 2021 SCEC Annual Meeting.
- 11207 Hauksson, E., Stock, J. M., & Husker, A. L. (2021, 08). Brawley Seismic Zone, Dextral Transcurrent and Rift Tectonics Connecting the San Andreas and Imperial Faults Across the Salton Trough, Southern California, USA. Poster Presentation at 2021 SCEC Annual Meeting.
- 11209 Grant Ludwig, L. (2021, 08). Pandemic lessons for earthquake resilience. Oral Presentation at 2021 SCEC Annual Meeting.
- 11213 Doody, C. D., Rodgers, A. J., Boehm, C., Afanasiev, M., Krischer, L., Chiang, A., & Simmons, N. (2021, 08). CANVAS: An Adjoint Waveform Tomography Model of California and Nevada. Poster Presentation at 2021 SCEC Annual Meeting.
- 11217 Hearn, E. H. (2021, 08). San Andreas Fault seismic-cycle models incorporating viscous shear zones and the SCEC Community Rheology Model (CRM). Poster Presentation at 2021 SCEC Annual Meeting.
- 11219 Lynett, P. J. (2021, 08). Hazard from Landslide-Generated Tsunamis: Progress and Challenges. Oral Presentation at 2021 SCEC Annual Meeting.
- 11220 Im, K., & Avouac, J. (2021, 08). Tectonic Tremor as Friction-Induced Inertial Vibration. Poster Presentation at 2021 SCEC Annual Meeting.
- 11221 Stewart, J. P. (2021, 08). Spatial distributions of liquefaction for seismic risk analysis. Oral Presentation at 2021 SCEC Annual Meeting.
- 11222 Pandey, K., Goebel, T. H., Taira, T., & Dresen, G. (2021, 08). Change in seismic velocity during laboratory triaxial stick-slip experiments. Poster Presentation at 2021 SCEC Annual Meeting.
- 11224 McBeck, J. A., Zhou, B., Ben-Zion, Y., & Renard, F. (2021, 08). Precursory off-fault deformation preceding slip along healed preexisting faults in restraining and releasing step overs. Oral Presentation at 2021 SCEC Annual Meeting.
- 11225 Gittins, D. B., & Hawthorne, J. C. (2021, 08). Are creep events big? Estimating their rupture extents.. Poster Presentation at 2021 SCEC Annual Meeting.
- 11228 Becker, T. W., Schulte-Pelkum, V., Behr, W. M., & Miller, M. S. (2021, 08). Tectonic inheritance during plate boundary evolution in southern California constrained from seismic anisotropy. Poster Presentation at 2021 SCEC Annual Meeting.
- 11229 Skoumal, R. (2021, 08). Characterizing spatiotemporal stress orientations in regions with induced seismicity. Poster Presentation at 2021 SCEC Annual Meeting.
- 11233 Plesch, A., Thurber, C. H., Tape, C., & Shaw, J. H. (2021, 08). The SCEC CVM effort: new basin models, enhanced access and tomographic updates. Oral Presentation at 2021 SCEC Annual Meeting.
- 11235 Oral, E., Ampuero, J., Ruiz, J., & Asimaki, D. (2021, 08). Numerical modelling of rupture dynamics constrained by past seismicity for ground motion prediction. Poster Presentation at 2021 SCEC Annual Meeting.
- 11238 Ajo-Franklin, J., Rodriguez-Tribaldos, V., Dobson, P., Nayak, A., Cheng, F., Chi, B., Wood, T., Robertson, M., Mellors, R., Rotermund, C., Dong, B., Wu, J., Morency, C., Templeton, D., & Matzel, E. (2021, 08). Exploring The Subsurface with Regional DAS Networks: Results from the Imperial Valley Dark Fiber Project. Oral Presentation at 2021 SCEC Annual Meeting.

- 11241 Biondi, E., Castellanos, J. A., & Clayton, R. W. (2021, 08). Ambient noise cross-correlation precursor imaging using dense seismic arrays. Poster Presentation at 2021 SCEC Annual Meeting.
- 11243 Silva, F., Maechling, P. J., Goulet, C. A., & Ben-Zion, Y. (2021, 08). The SCEC Broadband Platform: Open-Source Software for Strong Ground Motion Simulation and Validation. Poster Presentation at 2021 SCEC Annual Meeting.
- 11244 Chang, H., Abercrombie, R. E., Nakata, N., Pennington, C. N., Kemna, K. B., Cochran, E. S., & Harrington, R. M. (2021, 08). Quantifying earthquake source parameter uncertainties associated with local site effects using a dense array. Poster Presentation at 2021 SCEC Annual Meeting.
- 11246 Pierce, I., Williams, A. M., Koehler, R. D., & Arrowsmith, R. (2021, 08). Trenching the causative faults of the 2019 Ridgecrest sequence. Poster Presentation at 2021 SCEC Annual Meeting.
- 11247 Marshall, S. T., Plesch, A., & Shaw, J. H. (2021, 08). The SCEC community fault model: challenges, progress, and the future. Oral Presentation at 2021 SCEC Annual Meeting.
- 11250 Meng, H., Fan, W., McGuire, J. J., & Cochran, E. S. (2021, 08). Finite-source attributes of 39 M 3.9 to 5.5 Ridgecrest, California earthquakes. Poster Presentation at 2021 SCEC Annual Meeting.
- 11252 Aagaard, B. T., & Hirakawa, E. T. (2021, 08). The USGS San Francisco Bay region 3D seismic velocity model (SF-CVM) version 21.1.0: Updates for the East and North Bay and a new storage scheme for 3D Earth models. Poster Presentation at 2021 SCEC Annual Meeting.
- 11254 Milanese, E., Brink, T., Aghababaei, R., Molinari, J., & Cattania, C. (2021, 08). Origins of roughness evolution and strategies for its implementation on rate-state faults. Poster Presentation at 2021 SCEC Annual Meeting.
- 11255 Chen, Z., Keating, D., Das, J., Wittich, C., & Arrowsmith, R. (2021, 08). Virtual Shake Robot: Dynamics Simulation of Precariously Balanced Rocks for Hazard Analysis . Poster Presentation at 2021 SCEC Annual Meeting.
- 11261 Malloy, S., Mann, D., Lawrence, S., Basset, A., Feaux, K., & Mattioli, G. S. (2021, 08). UNAVCO State of NOTA Network / Southwest Regional Summary. Poster Presentation at 2021 SCEC Annual Meeting.
- 11256 Shea, T. A., Rodriguez Padilla, A. M., & Oskin, M. E. (2021, 08). Mapping the fractures associated with the magnitude 6.4 Ridgecrest earthquake foreshock from July 4, 2019. Poster Presentation at 2021 SCEC Annual Meeting.
- 11266 J Rastin, S., Rhoades, D. A., Gerstenberger, M. C., Rollins, C., & Christophersen, A. (2021, 08). Towards a distributed seismicity model for the New Zealand national seismic hazard update. Poster Presentation at 2021 SCEC Annual Meeting.
- 11272 Yang, Y., & Clayton, R. W. (2021, 08). Mapping LA basin depth with converted seismic phases. Poster Presentation at 2021 SCEC Annual Meeting.
- 11274 Segall, P., & Anderson, K. (2021, 08). Insights into Fault Friction and Caldera Collapse from the 2018 Kilauea eruption. Poster Presentation at 2021 SCEC Annual Meeting.
- 11268 Guns, K. A., Xu, X., Sandwell, D. T., & Bock, Y. (2021, 08). Pre-, Co- and Postseismic GNSS-Corrected Sentinel-1 InSAR Time Series: Moving Beyond the 2019 Ridgecrest, CA Earthquake Sequence. Poster Presentation at 2021 SCEC Annual Meeting.
- 11275 Yule, D., Matti, J. C., Kendrick, K. J., & Heermance, R. V. (2021, 08). Where's the slip? No slip in at least 40,000 years on northern-route strands of the San Andreas fault northwest of the Indio Hills, southern California . Poster Presentation at 2021 SCEC Annual Meeting.
- 11282 Li, J., Zhan, Z., & Wang, X. (2021, 08). Waveform-based moment tensor catalog in Southern California using 3D Community Velocity Model. Poster Presentation at 2021 SCEC Annual Meeting.
- 11283 He, V., & Clayton, R. W. (2021, 08). A Low-Cost Internet-of-Things Device for Earthquake Early Warning. Poster Presentation at 2021 SCEC Annual Meeting.

- 11286 An, Y., & Taira, T. (2021, 08). Ambient noise monitoring of stress-induced seismic velocity changes associated with the 2019 Ridgecrest earthquake sequence. Poster Presentation at 2021 SCEC Annual Meeting.
- 11287 Hanagan, C., Bennett, R. A., & Hughes, A. N. (2021, 08). Re-evaluation of the role of static stress triggering for aftershocks following the Ridgecrest, California earthquake sequence considering receiver plane uncertainty. Poster Presentation at 2021 SCEC Annual Meeting.
- 11288 Rodgers, A. J., Doody, C. D., Chiang, A., Krischer, L., Boehm, C., Afanasiev, M., & Simmons, N. (2021, 08). Adjoint Waveform Tomography of the Crust and Uppermost Mantle of the Western United States for Improved Waveform Simulations and Source Characterization. Poster Presentation at 2021 SCEC Annual Meeting.
- 11293 Armstrong, E. M., Ault, A. K., Bradbury, K. K., Savage, H. M., Thomson, S., & Polissar, P. J. (2021, 08). Comparison of zircon (U-Th)/He and biomarker analyses to quantify coseismic temperature rise along the Punchbowl fault, CA. Poster Presentation at 2021 SCEC Annual Meeting.
- 11264 Hardebeck, J. L. (2021, 08). What Physical Properties Control Aftershock Locations?. Poster Presentation at 2021 SCEC Annual Meeting.
- 11298 Hu, Z., Olsen, K. B., & Day, S. M. (2021, 08). Calibration of the Near-surface Seismic Structure in the SCEC Community Velocity Model Version 4. Poster Presentation at 2021 SCEC Annual Meeting.
- 11301 Paris, G., & Michael, A. J. (2021, 08). An Interactive Web Tool to Visualize and Improve USGS Operational Aftershock Forecasts. Poster Presentation at 2021 SCEC Annual Meeting.
- 11304 Bal, A., Gabriel, A., & Ulrich, T. (2021, 08). 3D Modeling of the Kathmandu Basin Effects on Ground Motions for the 2015 Gorkha earthquake. Poster Presentation at 2021 SCEC Annual Meeting.
- 11305 Jeppson, T. N., Lockner, D. A., & Moore, D. (2021, 08). Strength and fluid transmissivity evolution during shearing of laboratory faults under hydrothermal conditions. Poster Presentation at 2021 SCEC Annual Meeting.
- 11308 Baltay, A. S., Abercrombie, R. E., & Taira, T. (2021, 08). Introduction to the SCEC Community Stress Drop Validation Study TAG. Poster Presentation at 2021 SCEC Annual Meeting.
- 11307 van der Elst, N. J., McBride, S. K., Hardebeck, J. L., Michael, A. J., & Page, M. T. (2021, 08). Communicating Aftershock Forecasts for Situational Awareness During Humanitarian Response. Poster Presentation at 2021 SCEC Annual Meeting.
- 11309 Gao, A. F., Yang, Y., Castellanos, J. A., Ross, Z. E., Azizzadenesheli, K., & Clayton, R. W. (2021, 08). Seismic Wave Propagation and Inversion with Neural Operators. Poster Presentation at 2021 SCEC Annual Meeting.
- 11311 Devin, E. G., Parker, G. A., Baltay, A. S., Nye, T., & Sahakian, V. J. (2021, 08). Stress Drop in Ridgecrest Sequence Events from the Generalized Inversion Technique. Poster Presentation at 2021 SCEC Annual Meeting.
- 11310 Yin, J., Denolle, M. A., & He, B. (2021, 08). Separation of seismic signal and ambient noise using deep neural network. Poster Presentation at 2021 SCEC Annual Meeting.
- 11312 Lambert, V. R., & Lapusta, N. (2021, 08). Resolving simulated sequences of earthquakes and fault interactions . Poster Presentation at 2021 SCEC Annual Meeting.
- 11313 Cebry, S. B., Ke, C., & McLaskey, G. C. (2021, 08). Role of background stress state in fluid induced aseismic slip and dynamic rupture on a 3 meter laboratory fault. Poster Presentation at 2021 SCEC Annual Meeting.
- 11325 Fougere, D. M., Dolan, J. F., Anthonissen, C., Gauriau, J., Ivester, A. H., McGill, S. F., & Rhodes, E. J. (2021, 08). At least twelve event Holocene to late Pleistocene paleo-earthquake record on the central Garlock fault at Koehn Lake, southern California . Poster Presentation at 2021 SCEC Annual Meeting.

- 11326 Hirakawa, E. T., & Aagaard, B. T. (2021, 08). Updates for San Francisco Bay Sediments in the USGS SF-CVM and Simulation of Long-Duration Shaking in the East Bay Plain. Poster Presentation at 2021 SCEC Annual Meeting.
- 11331 Matsubara, M., Yano, T. E., & Ishiyama, T. (2021, 08). Cutoff depth and coseismic slip zone for the large earthquake along the Sea of Japan. Poster Presentation at 2021 SCEC Annual Meeting.
- 11338 Zhang, S., Zhang, Y., & Wu, Z. (2021, 08). Conducting a forward long-to-intermediate-term forecast and evaluation in the Yunnan-Sichuan region in China. Poster Presentation at 2021 SCEC Annual Meeting.
- 11340 Schulte-Pelkum, V., & Kilb, D. (2021, 08). Synthesis of fault geometry, seismicity, and deep structural fabric to constrain Community Fault (CFM) and Rheology (CRM) Models. Poster Presentation at 2021 SCEC Annual Meeting.
- 11341 Xu, S., Dimasaka, J. T., Wald, D. J., & Noh, H. (2021, 08). Causal Graph-based Joint Estimation of Ground Failure and Building Damage from Geospatial Prior Models and Satellite Imagery. Poster Presentation at 2021 SCEC Annual Meeting.
- 11344 Withers, K. B., Ma, S., Wang, Y., Ulrich, T., Liu, D., Duan, B., Gabriel, A., Ampuero, J., Oral, E., Dalguer, L. A., Goulet, C. A., & Asimaki, D. (2021, 08). Generation of Broadband Ground Motion from Dynamic Rupture Simulations: A Group Modeling Approach towards better Characterizing Seismic Hazard for Engineering Applications. Poster Presentation at 2021 SCEC Annual Meeting.
- 11348 Rodriguez Padilla, A. M., & Oskin, M. E. (2021, 08). A Curvature-based Approach to Measuring Permanent Long-wavelength Off-fault Deformation: Applications to the Volcanic Tablelands, CA. Poster Presentation at 2021 SCEC Annual Meeting.
- 11349 Kitamikado, C. R., Moon, S., & Yong, A. K. (2021, 08). Assessing bedrock weathering patterns from P-wave and S-wave velocity profiles and their relationships to landscape positions.. Poster Presentation at 2021 SCEC Annual Meeting.
- 11351 Milner, K. R., & Field, E. H. (2021, 08). OpenSHA: New tools and file formats for building and analyzing UCERF3-style rupture sets and running inversions. Poster Presentation at 2021 SCEC Annual Meeting.
- 11352 Wang, Y., & Goulet, C. A. (2021, 08). Role of fault maturity on relationship of surface displacement and rupture length. Poster Presentation at 2021 SCEC Annual Meeting.
- 11354 Quintana, M., Rodriguez Padilla, A. M., Chadly, D. M., & Oskin, M. E. (2021, 08). Near-field deformation of the southeastern strand of the 2019 Ridgecrest mainshock. Poster Presentation at 2021 SCEC Annual Meeting.
- 11350 Argueta, M. O., Saha, S., Moon, S., Brown, N. D., Rockwell, T. K., Scharer, K. M., Morgan, Z., & Leidelmeijer, J. (2021, 08). Constraining long-term sediment depositional history at ancient Lake Cahuilla, Coachella, California. Poster Presentation at 2021 SCEC Annual Meeting.
- 11358 Meng, X., Goulet, C. A., Milner, K. R., & Callaghan, S. (2021, 08). A Nonergodic Ground Motion Model in Southern California with Spatially Varying Coefficients Using a SCEC CyberShake Dataset. Poster Presentation at 2021 SCEC Annual Meeting.
- 11353 Yu, E., Acharya, P., Bhaskaran, A., Chen, S., Andrews, J. R., Thomas, V., Ross, Z. E., Husker, A. L., Hauksson, E., & Clayton, R. W. (2021, 08). Using the Southern California Earthquake Data Center (SCEDC) and the Southern California Seismic Network (SCSN) Products and Services for Earthquake Research. Poster Presentation at 2021 SCEC Annual Meeting.
- 11360 Saunders, J. K., Minson, S. E., Cochran, E. S., Bunn, J., Baltay, A. S., Kilb, D., & O'Rourke, C. (2021, 08). A Twist of PLUM: Low-Magnitude Earthquakes and Ground-Motion-Based Early Warning. Poster Presentation at 2021 SCEC Annual Meeting.
- 11361 Wolfe, F. D., Shaw, J. H., & Plesch, A. (2021, 08). Kinematic evolution of the Palos Verdes restraining bend and 3-D architecture of the fault, Southern California. Poster Presentation at 2021 SCEC Annual Meeting.

- 11306 Cheng, Y., Ross, Z. E., Hauksson, E., & Ben-Zion, Y. (2021, 08). A Refined Comprehensive Earthquake Focal Mechanism Catalog for Southern California Derived with Deep Learning Algorithms . Poster Presentation at 2021 SCEC Annual Meeting.
- 11355 Adam, R. N., Powell, J., Ford, J., Scott, C. P., & Arrowsmith, R. (2021, 08). Pre and post rupture Fault Mapping Comparisons applications to Probabilistic Fault Displacement Hazard. Poster Presentation at 2021 SCEC Annual Meeting.
- 11362 Neely, J. S., Salditch, L., Spencer, B. D., & Stein, S. (2021, 08). A more realistic model for the probability of large earthquakes. Poster Presentation at 2021 SCEC Annual Meeting.
- 11366 Young, E. K., Oskin, M. E., & Rodriguez Padilla, A. M. (2021, 08). Effectiveness and reproducibility of remote mapping of the 2019 Ridgecrest earthquake ruptures with airborne lidar and imagery. Poster Presentation at 2021 SCEC Annual Meeting.
- 11368 Rathje, E., Ojomo, O., & Kumar, K. (2021, 08). Regional Assessments of Earthquake-Induced Landslides. Oral Presentation at 2021 SCEC Annual Meeting.
- 11364 Atterholt, J. W., & Ross, Z. E. (2021, 08). Bayesian framework for inversion of second-order stress glut moments. Poster Presentation at 2021 SCEC Annual Meeting.
- 11371 Walker, R. L., Aagaard, B. T., Knepley, M. G., & Williams, C. A. (2021, 08). Implementing and Benchmarking Poroelasticity in PyLith. Poster Presentation at 2021 SCEC Annual Meeting.
- 11374 Florez, M. A., Caporale, M., Pakpoom, B., Ross, Z. E., Asimaki, D., & Meier, M. (2021, 08). Data-driven synthesis of broadband earthquake ground motions using artificial intelligence. Poster Presentation at 2021 SCEC Annual Meeting.
- 11381 Page, M. T., & van der Elst, N. J. (2021, 08). Aftershocks Preferentially Occur in Previously Active Areas. Poster Presentation at 2021 SCEC Annual Meeting.
- 11378 Diaz, M. A., Ross, Z. E., & Wilding, J. (2021, 08). Understanding the physical properties of the Kilauea volcano by analyzing Long-Period volcanic earthquakes. Poster Presentation at 2021 SCEC Annual Meeting.
- 11384 Callaghan, S., Goulet, C. A., Silva, F., Maechling, P. J., Graves, R. W., O'Reilly, O., Olsen, K. B., Yeh, T., Kottke, A. R., & Ben-Zion, Y. (2021, 08). Verification of the broadband CyberShake platform. Poster Presentation at 2021 SCEC Annual Meeting.
- 11385 Cochran, E. S., Saunders, J. K., Minson, S. E., Bunn, J., Kilb, D., Baltay, A. S., O'Rourke, C., Hoshiba, M., & Kodera, Y. (2021, 08). Optimizing alerts by tuning the PLUM prediction radius for the ShakeAlert System. Poster Presentation at 2021 SCEC Annual Meeting.
- 11389 Lapusta, N., & Lambert, V. R. (2021, 08). Modeling absolute stress levels on mature faults: Implications for seismic radiation and earthquake statistics . Poster Presentation at 2021 SCEC Annual Meeting.
- 11394 Ogata, Y., & Katsura, K. (2021, 08). Modified estimation and forecasting of the hierarchical space-time ETAS (HIST-ETAS) model for earthquake catalogs in a wide area possessing long- and short-term incompleteness. Poster Presentation at 2021 SCEC Annual Meeting.
- 11395 Mei, C., Barbot, S. D., & Wu, W. (2021, 08). Laboratory investigation of multiple controls on fault stability and rupture dynamics. Poster Presentation at 2021 SCEC Annual Meeting.
- 11399 Krishnan, S. (2021, 08). A relational MySQL database for rupture-to-rafters simulations. Poster Presentation at 2021 SCEC Annual Meeting.
- 11400 Cheng, G., & Barnhart, W. D. (2021, 08). Power-law viscoelastic flow of the lower Makran accretionary prism following the 2013 Baluchistan earthquake. Poster Presentation at 2021 SCEC Annual Meeting.
- 11379 Cortez, J., Kyriakopoulos, C., Wu, B., Oglesby, D. D., Douilly, R., Chadhuri, K., & Ghosh, A. (2021, 08). Stress transfer and fault geometry's influence on the 2019 Ridgecrest Earthquake slip distribution. Poster Presentation at 2021 SCEC Annual Meeting.

- 11402 Schrottenboer, B. J., Burgette, R. J., & Scharer, K. M. (2021, 08). Investigating the Simi-Santa Rosa fault with pre-development high-resolution topography. Poster Presentation at 2021 SCEC Annual Meeting.
- 11406 Alves da Silva, J., Wolfe, F. D., Huprikar, A., Plesch, A., Juanes, R. H., & Shaw, J. H. (2021, 08). New initiative to examine the impacts of oil and gas operations on fault stability and earthquake processes in the Los Angeles basin, CA. Poster Presentation at 2021 SCEC Annual Meeting.
- 11408 Gomez, J. R., & Yong, A. K. (2021, 08). Minimizing Geophysical Site Characterization Procedures to Estimate VS30 through the Use of VR40. Poster Presentation at 2021 SCEC Annual Meeting.
- 11410 Carducci, A., Petrucci, A., De Santis, A., de Nardis, R., & Lavecchia, G. (2021, 08). Correlation between Λ fault parameter and statistical frequency of earthquakes along depth: a case study in Southern California. Poster Presentation at 2021 SCEC Annual Meeting.
- 11412 Erickson, B. A., Jiang, J., Abdelmeguid, M., Almquist, M., Ampuero, J., Ando, R., Barbot, S. D., Cattania, C., Chen, A., Dal Zilio, L., Dunham, E. M., Elbanna, A. E., Gabriel, A., Harvey, T., Huang, Y., Kaneko, Y., Kozdon, J. E., Lambert, V. R., Lapusta, N., Li, D., Li, M., Liang, C., Liu, Y., Ozawa, S., Pranger, C., Segall, P., Sun, Y., Thakur, P., Uphoff, C., van Dinther, Y., & Yang, Y. (2021, 08). Community Code Verification Exercises for Simulations of Earthquake Sequences and Aseismic Slip (SEAS): Dynamic Effects and Dipping Fault Geometries. Poster Presentation at 2021 SCEC Annual Meeting.
- 11407 Gaudreau, E., Hollingsworth, J., Nissen, E., & Funning, G. J. (2021, 08). Three-dimensional off-fault deformation patterns of the Mw 6.6 1971 San Fernando, California earthquake. Poster Presentation at 2021 SCEC Annual Meeting.
- 11414 Zhang, H., Meng, H., & Ben-Zion, Y. (2021, 08). Subsurface seismic properties across the southern San Andreas Fault in the Thousand Palms Canyon based on train-generated seismic waveforms . Poster Presentation at 2021 SCEC Annual Meeting.
- 11416 Tang, V., Williams-Stroud, S. C., & Elbanna, A. E. (2021, 08). Using Deep Learning-Enabled Seismology to Illuminate Structure and Stress during Injection-Induced Seismicity in Decatur, IL. Poster Presentation at 2021 SCEC Annual Meeting.
- 11419 Prado, R., Rodriguez Padilla, A. M., & Oskin, M. E. (2021, 08). Localized and distributed deformation in a step-over of the Ridgecrest 2019 mainshock. Poster Presentation at 2021 SCEC Annual Meeting.
- 11420 BAZAN FLORES, L. I., Kyriakopoulos, C., Oglesby, D. D., Meltzner, A. J., Rockwell, T. K., & Fletcher, J. M. (2021, 08). Dynamic Interactions Between the Southern San Andreas Fault and Normal Faults in the Brawley Seismic Zone . Poster Presentation at 2021 SCEC Annual Meeting.
- 11421 Sieh, K. (2021, 08). My Sojourn into and through Paleoseismology. Oral Presentation at 2021 SCEC Annual Meeting.
- 11426 Wang, K., Beroza, G. C., & Ellsworth, W. L. (2021, 08). New insights into the Rangely earthquake control experiment. Poster Presentation at 2021 SCEC Annual Meeting.
- 11427 LaPlante, A., & Regalla, C. (2021, 08). Tectonogeomorphic evidence for late Holocene complex rupture linking the Panamint Valley and Ash Hill faults, Eastern California Shear Zone. Poster Presentation at 2021 SCEC Annual Meeting.
- 11428 Qiu, H., Chi, B., & Ben-Zion, Y. (2021, 08). Internal structure of the Garlock fault zone from Ridgecrest aftershocks data recorded by dense linear arrays. Poster Presentation at 2021 SCEC Annual Meeting.
- 11429 Jia, Z., & Clayton, R. W. (2021, 08). Evaluating a unified 3D velocity model for the Los Angeles Basin using ambient noise dispersions and earthquakes . Poster Presentation at 2021 SCEC Annual Meeting.
- 11430 Sun, Y., & Cattania, C. (2021, 08). Propagation of Slow Slip Events on a Rough Fault. Poster Presentation at 2021 SCEC Annual Meeting.

- 11431 Wang, C., Fan, W., & Gong, J. (2021, 08). Dynamic Triggering Cases at the Salton Sea Geothermal Field. Poster Presentation at 2021 SCEC Annual Meeting.
- 11432 Qin, L., Steidl, J. H., Hudson, K. S., Lamere, T., Qiu, H., & Ben-Zion, Y. (2021, 08). NEAR-SURFACE SHEAR WAVE VELOCITY AND ATTENUATION AT GARNER VALLEY, CALIFORNIA. Poster Presentation at 2021 SCEC Annual Meeting.
- 11433 Lu, Y., & Ben-Zion, Y. (2021, 08). Validation of seismic velocity models in southern California with full-waveform simulations. Poster Presentation at 2021 SCEC Annual Meeting.
- 11435 Sheng, Y., Mordret, A., Sager, K., Brenguier, F., Boué, P., Rousset, B., Vernon, F. L., & Ben-Zion, Y. (2021, 08). Long-base seismic interferometry reveals a hidden slow-slip event near the Anza seismic gap. Poster Presentation at 2021 SCEC Annual Meeting.
- 11434 Toghramadjian, N., & Shaw, J. H. (2021, 08). 3D geometry and kinematics of the restraining bend at Signal Hill: implications for seismic hazard for the Newport-Inglewood fault, Los Angeles, CA. Poster Presentation at 2021 SCEC Annual Meeting.
- 11436 Toghramadjian, N., Ermert, L. A., & Denolle, M. A. (2021, 08). A tale of urban seismology: ambient seismic noise, machine learning methods, and seismic hazard analysis at the Seattle basin edge. Poster Presentation at 2021 SCEC Annual Meeting.
- 11438 Lee, Y., Goulet, C., Hu, Z., Milner, K. R., Callaghan, S., & Eguchi, R. T. (2021, 08). Impacts of CyberShake on Risk Assessments for Distributed Infrastructure Systems. Poster Presentation at 2021 SCEC Annual Meeting.
- 11439 Aguilar, B. J., Rodriguez Padilla, A. M., Quintana, M., Shea, T. A., & Oskin, M. E. (2021, 08). Surficial fractures from the middle of the 2019 Ridgecrest mainshock mapped from high-resolution aerial imagery. Poster Presentation at 2021 SCEC Annual Meeting.
- 11440 Lim, C., Lapins, S., Werner, M. J., & Segou, M. (2021, 08). Microseismic monitoring using deep learning. Poster Presentation at 2021 SCEC Annual Meeting.
- 11445 Zhou, B., McBeck, J. A., Renard, F., & Ben-Zion, Y. (2021, 08). Simulations of localization process leading to large earthquakes. Poster Presentation at 2021 SCEC Annual Meeting.
- 11446 Mia, M., Abdelmeguid, M., & Elbanna, A. E. (2021, 08). Role of injection location and injection pressure magnitude in modulating sequence of induced earthquakes and aseismic slip. Poster Presentation at 2021 SCEC Annual Meeting.
- 11450 Marliyani, G. I., Pramumijoyo, S., & Helmi, H. (2021, 08). Active tectonic regime of Java Island, Indonesia from seismic strain rate analysis. Poster Presentation at 2021 SCEC Annual Meeting.
- 11453 Ramírez-Ramos, E. E., Stock, J. M., Ross, Z. E., Vidal-Villegas, A., & Ramírez Hernández, J. (2021, 08). Seismotectonics of the California-Baja California region.. Poster Presentation at 2021 SCEC Annual Meeting.
- 11455 Shearer, P. M., Abercrombie, R. E., & Trugman, D. T. (2021, 08). Improved stress drop estimates for M 1.5 to 4 earthquakes in Southern California from 1996 to 2019. Poster Presentation at 2021 SCEC Annual Meeting.
- 11459 Villa, V., Li, Y., Ghose, R., Clayton, R. W., & Persaud, P. (2021, 08). 3D Basement-Depth Map for the San Gabriel, Chino, and San Bernardino Basins. Poster Presentation at 2021 SCEC Annual Meeting.
- 11425 Wilson, L. J., Luttrell, K. M., & Hardebeck, J. L. (2021, 08). Understanding Crustal Stress Heterogeneity in the Los Angeles Region using Focal Mechanism Inversions and Shear Wave Splitting Fast Velocities. Poster Presentation at 2021 SCEC Annual Meeting.
- 11460 Robles, F. A., Arzili, O. A., Schwartz, J., Miranda, E. A., Klepeis, K. A., & Mora-Klepeis, G. (2021, 08). Mesozoic Fabric Inheritance in the Ductile Roots of the Quaternary Cucamonga Fault. Poster Presentation at 2021 SCEC Annual Meeting.

- 11463 Liu, X., Beroza, G. C., & Ben-Zion, Y. (2021, 08). Ambient noise attenuation tomography of Love & Rayleigh waves applied to the Ramona reservation linear array across the San Jacinto Fault Zone with amplitude correction for focusing/defocusing. Poster Presentation at 2021 SCEC Annual Meeting.
- 11464 Ghose, R., Persaud, P., Li, Y., Villa, V., & Clayton, R. W. (2021, 08). High-Frequency Receiver Function Profiles Reveal Sedimentary Basin Structure Beneath the Northern Los Angeles Area. Poster Presentation at 2021 SCEC Annual Meeting.
- 11466 Nie, S., & Barbot, S. D. (2021, 08). Pulse-like ruptures linked to chaotic recurrence patterns in seismic cycles with compliant fault zones. Poster Presentation at 2021 SCEC Annual Meeting.
- 11470 Wu, B., Oglesby, D. D., Kyriakopoulos, C., & Tarnowski, J. M. (2021, 08). Scaling of the solution in an elastodynamic rupture problem: an analytical proof. Poster Presentation at 2021 SCEC Annual Meeting.
- 11471 Regalla, C., Kirby, E., Mahan, S. A., & McDonald, E. (2021, 08). Late Holocene Rupture History of the Ash Hill Fault, Eastern California Shear Zone. Poster Presentation at 2021 SCEC Annual Meeting.
- 11472 Lewright, L. M., Prathap, A., Assor, C. E., Graham, J. R., & Louie, J. N. (2021, 08). Low-Frequency Examination of Synthetic Reno-Area Basin Amplification from M3 Earthquakes at a Variety of Azimuths. Poster Presentation at 2021 SCEC Annual Meeting.
- 11461 Assor, C. E., Graham, J., Lewright, L. M., Prathap, A., & Louie, J. N. (2021, 08). 2D Refraction Microtremor Analysis of SW4 Synthetics. Poster Presentation at 2021 SCEC Annual Meeting.
- 11473 Shen, Z., & Liu, Z. (2021, 08). Resolve 3-dimensional deformation field in southern California using GNSS and InSAR data. Poster Presentation at 2021 SCEC Annual Meeting.
- 11475 Inbal, A., Ampuero, J., & Clayton, R. W. (2021, 08). Earthquake detectability and depth resolution with dense arrays. Poster Presentation at 2021 SCEC Annual Meeting.
- 11477 Salek, S., & Evans, E. L. (2021, 08). Estimating geodetic locking depth and long-term slip rate along the central San Andreas Fault using Neural Networks. Poster Presentation at 2021 SCEC Annual Meeting.
- 11476 Uchide, T. (2021, 08). Quantification of the Complexities in Rupture Processes of Small Earthquakes by Multiple Spectral Ratio Analyses. Poster Presentation at 2021 SCEC Annual Meeting.
- 11479 Andreuttiova, L., Hollingsworth, J., Vermeesch, P., Mitchell, T. M., & Bergman, E. (2021, 08). Using optical image correlation to quantify the three-dimensional displacement field of historical events: Example from the 1959 Mw 7.2 Hebgen Lake earthquake.. Poster Presentation at 2021 SCEC Annual Meeting.
- 11481 Mizrahi, L., Nandan, S., & Wiemer, S. (2021, 08). Towards next-generation earthquake forecasting by embracing short-term aftershock incompleteness. Poster Presentation at 2021 SCEC Annual Meeting.
- 11484 Dal Zilio, L., Lapusta, N., Avouac, J., & Gerya, T. (2021, 08). Modeling sequences of seismic and aseismic deformation in a nonlinear viscoelastic megathrust. Poster Presentation at 2021 SCEC Annual Meeting.
- 11485 White, M. C., Ben-Zion, Y., & Vernon, F. L. (2021, 08). A Detailed Earthquake Catalog for the San Jacinto Fault-Zone Region in Southern California and the period 2008-2020. Poster Presentation at 2021 SCEC Annual Meeting.
- 11494 Puel, S., Becker, T. W., Villa, U., Ghattas, O., Liu, D., & Khattatov, E. (2021, 08). Forward-Inverse Modeling of Earthquake Cycle Deformation. Poster Presentation at 2021 SCEC Annual Meeting.
- 11496 Liu, Y., Ross, Z. E., Cochran, E. S., & Lapusta, N. (2021, 08). A unified perspective of seismicity and fault coupling along the San Andreas Fault. Poster Presentation at 2021 SCEC Annual Meeting.
- 11506 Elbanna, A. E., Gabriel, A., & Ben-Zion, Y. (2021, 08). Modeling Inelastic deformations in fault zones: From discrete to distributed damage. Poster Presentation at 2021 SCEC Annual Meeting.

- 11505 Badt, N. Z., Tullis, T. E., Hirth, G., & Huber, C. (2021, 08). The effects of temperature and pressure on thermal pressurization in localized fault zones. Poster Presentation at 2021 SCEC Annual Meeting.
- 11507 Kohler, M. D., & Prieto, G. A. (2021, 08). Time-Varying Shear-Wave Velocities in a High-Rise During the 2019 M6.4 and M7.1 Ridgecrest Earthquakes from Wavefield Interferometry. Poster Presentation at 2021 SCEC Annual Meeting.
- 11508 ZHOU, Y., Ghosh, A., FANG, L., YUE, H., & ZHOU, S. (2021, 08). Foreshock Sequence of the 2021 Mw6.1 YangBi Earthquake Sequence, Yunnan, China: Not a Triggered Cascade. Poster Presentation at 2021 SCEC Annual Meeting.
- 11512 Olsen, K. B., Hu, Z., & Day, S. M. (2021, 08). 0-5 Hz Deterministic 3D Ground Motion Simulations for the 2014 La Habra, California, Earthquake. Poster Presentation at 2021 SCEC Annual Meeting.
- 11504 Zaliapin, I., & Ben-Zion, Y. (2021, 08). Earthquake clustering and localization of seismicity before large events. Poster Presentation at 2021 SCEC Annual Meeting.
- 11513 Nicholson, C., Plesch, A., Shaw, J. H., & Hauksson, E. (2021, 08). Updates and Additions to the Community Fault Model (CFM version 5.3): detachments, cross faults and en echelon fault sets. Poster Presentation at 2021 SCEC Annual Meeting.
- 11515 Anthonissen, C., Wolfe, F. D., Leon, L. A., Don, J., Dolan, J. F., Shaw, J. H., Rittenour, T. M., Rhodes, E. J., & Ivester, A. (2021, 08). Back-limb and fore-limb folding of the Puente Hills blind-thrust fault with implications for late Pleistocene slip-rate estimates and seismic hazard analysis in the Los Angeles Basin, southern California. Poster Presentation at 2021 SCEC Annual Meeting.
- 11503 Sone, H., Talukdar, M., & Condon, K. (2021, 08). Time-dependent deformation of thermally-fractured granites observed in laboratory creep experiments.. Poster Presentation at 2021 SCEC Annual Meeting.
- 11518 Plesch, A., Marshall, S. T., Nicolae, A., Shaw, J. H., Maechling, P. J., & Su, M. (2021, 08). Updates to the SCEC Community Fault Model (CFM), and to web-based tools, and plans for its peer review and version 6.0. Poster Presentation at 2021 SCEC Annual Meeting.
- 11520 DiMonte, A. A., Ault, A. K., Hirth, G., & Meyers, C. D. (2021, 08). Characterizing shallow slow slip with natural and experimental hematite fault surfaces . Poster Presentation at 2021 SCEC Annual Meeting.
- 11514 Abdelmeguid, M., & Elbanna, A. E. (2021, 08). Advanced Earthquake Cycle Simulations: Bimaterial Interfaces, LVFZ, and nonlinear bulk rheology. Poster Presentation at 2021 SCEC Annual Meeting.
- 11521 Parker, G. A., & Baltay, A. S. (2021, 08). The Effect of Earthquake Depth on Ground Motion Predictions for Earthquake Early Warning Alerting . Poster Presentation at 2021 SCEC Annual Meeting.
- 11523 Trexler, C., Morelan, A. E., DeLong, S., & Pickering, A. J. (2021, 08). Topographic expression of active faulting along the Great Valley Thrust system near Winters, northern California. Poster Presentation at 2021 SCEC Annual Meeting.
- 11526 Thom, C. A., Hansen, L. N., Goldsby, D. L., & Brodsky, E. E. (2021, 08). A microphysical model of rate- and state-friction controlled by dislocation glide and backstress (internal stress) evolution. Poster Presentation at 2021 SCEC Annual Meeting.
- 11524 Wang, B., & Barbot, S. D. (2021, 08). Crack-like and pulse-like ruptures, seismic swarms, and tremorgenic slow-slip events in velocity-weakening, temperature-strengthening faults. Poster Presentation at 2021 SCEC Annual Meeting.
- 11525 McBrearty, I., & Beroza, G. C. (2021, 08). Earthquake Phase Association with Graph Neural Networks. Poster Presentation at 2021 SCEC Annual Meeting.
- 11529 Funning, G. J., Bruhat, L., van den Ende, M., Gabriel, A., Hicks, S., Jolivet, R., Lecocq, T., & Rowe, C. D. (2021, 08). Seismica: a community-led Diamond Open-Access journal for seismology and earthquake science. Poster Presentation at 2021 SCEC Annual Meeting.

- 11528 Abolfathian, N., Fielding, E. J., Bekaert, D., Donnellan, A., & Sangha, S. S. (2021, 08). Spatiotemporal variations of stress and strain in the crust near 2019 Ridgecrest Sequence Earthquakes. Poster Presentation at 2021 SCEC Annual Meeting.
- 11532 Braunagel, M. J., & Griffith, W. A. (2021, 08). Microstructural Controls on Mixed Mode Dynamic Fracture Propagation in Crystalline and Porous Sedimentary Rocks. Poster Presentation at 2021 SCEC Annual Meeting.
- 11533 Chaudhuri, K., & Ghosh, A. (2021, 08). Discovery of Offshore Very Low Frequency Earthquakes in the Cascadia . Poster Presentation at 2021 SCEC Annual Meeting.
- 11531 Steinhardt, W., & Brodsky, E. E. (2021, 08). Direct Measurements of Slow Slip Events on Novel Laboratory Fault Show Constant Stress Drop. Poster Presentation at 2021 SCEC Annual Meeting.
- 11535 Savran, W. H., Bayona, J. A., Werner, M. J., & Maechling, P. J. (2021, 08). Reproducible earthquake forecasting experiments with pyCSEP. Poster Presentation at 2021 SCEC Annual Meeting.
- 11530 Don, J., Shaw, J. H., & Plesch, A. (2021, 08). Comprehensive 3D model of the Ventura-Pitas Point fault system and associated structures in the Santa Barbara Channel and Ventura basin for the CFM. Poster Presentation at 2021 SCEC Annual Meeting.
- 11543 Jacquey, A. B., & Viesca, R. C. (2021, 08). Nucleation and arrest of aseismic fault slip, during and after fluid pressurization. Poster Presentation at 2021 SCEC Annual Meeting.
- 11546 Tobar, C., & Breuer, A. N. (2021, 08). The Workflow of Large Scale Ground Motion Simulations: Preprocessing, forward simulations, postprocessing. Poster Presentation at 2021 SCEC Annual Meeting.
- 11547 Ajala, R., Persaud, P., & Juarez, A. (2021, 08). Beyond 1 Hz: Double-difference active source adjoint tomography of Salton Trough. Poster Presentation at 2021 SCEC Annual Meeting.
- 11544 Viesca, R. C. (2021, 08). Self-similar fault slip in response to fluid injection. Poster Presentation at 2021 SCEC Annual Meeting.
- 11542 Goulet, C. A., Meng, X., & Devine, S. C. (2021, 08). Database of Fragile Geologic Features from the Trona Pinnacles National Monument. Poster Presentation at 2021 SCEC Annual Meeting.
- 11545 Grant Ludwig, L., Mirkhanian, M. A., Donnellan, A., Parker, J. W., Wang, J., & Pierce, M. E. (2021, 08). Using GeoGateway to access NASA Earth Science data for teaching. Poster Presentation at 2021 SCEC Annual Meeting.
- 11557 Rosa, C., Kakaria, R., & Dawson, T. (2021, 08). Preliminary Mapping of Surface Fault Rupture and Ground-Deformation Features of the 2019 M6.4 and M7.1 Ridgecrest Earthquake Sequence from Post-Earthquake Lidar and Orthoimagery Datasets. Poster Presentation at 2021 SCEC Annual Meeting.
- 11558 Karim, M. F., Rahman, M., Sikder, A. M., & Shanker, D. (2021, 08). Tectonic and Geotechnical Review for Engineering Design and Seismic Risk Management in Bangladesh. Poster Presentation at 2021 SCEC Annual Meeting.
- 11552 Bock, Y., Moore, A. W., Fang, P., Golriz, D., Argus, D. F., Liu, Z., Guns, K. A., Xu, X., Sandwell, D. T., Sullivan, A., Jiang, S., & Knox, A. (2021, 08). Geodetic Data, Data Products and Displacement Time Series Portal. Poster Presentation at 2021 SCEC Annual Meeting.
- 11537 Bayona, J. A., Savran, W. H., & Werner, M. J. (2021, 08). Are regionally calibrated earthquake forecast models more informative than global models? First results from California and Italy. Poster Presentation at 2021 SCEC Annual Meeting.
- 11559 McPhillips, D., Garcia Suarez, J., Gonzalez, E., Scharer, K. M., & Asimaki, D. (2021, 08). Testing the seismic response of rock pillars using in situ strength measurements. Poster Presentation at 2021 SCEC Annual Meeting.
- 11556 Dunham, A., Kiser, E., Kargel, J., Haritashya, U., Watson, S., Shugar, D., Hughes, A. N., & DeCelles, P. (2021, 08). Topographic control of ground motions and landslides from the 2015 Gorkha earthquake. Poster Presentation at 2021 SCEC Annual Meeting.

- 11560 Reches, Z., Chen, X., Chitta, S., & Zu, X. (2021, 08). Dynamic fault weakening during earthquakes: Rupture or Friction?. Poster Presentation at 2021 SCEC Annual Meeting.
- 11554 Zega, Z., & Zhu, W. (2021, 08). Slow Faulting Induced by Subcritical Crack Growth at High Pore Fluid Pressures . Poster Presentation at 2021 SCEC Annual Meeting.
- 11551 Ramos-Sepulveda, M. E., Parker, G. P., Li, M., Ilhan, O., Uysal, H., Hashash, Y., Rathje, E., & Stewart, J. P. (2021, 08). Joint Calibration of NGA-East GMMs and Site Amplification Models Against CENA Ground Motions . Poster Presentation at 2021 SCEC Annual Meeting.
- 11522 Akciz, S. O., & Kirby, M. (2021, 08). Multidisciplinary investigation of determining channel incision ages in the Carrizo Plain, California.. Poster Presentation at 2021 SCEC Annual Meeting.
- 11564 Smith, D. E., Andrews, J. R., McGuire, J. J., & Huynh, M. (2021, 08). Testing Contour Triggering In ShakeAlert Earthquake Early Warning. Poster Presentation at 2021 SCEC Annual Meeting.
- 11569 Berne, A., & Stock, J. M. (2021, 08). INVESTIGATING THE STRUCTURE OF THE 'SAND HILLS FAULT' THROUGH DIFFUSE CO₂ DEGASSING MEASUREMENTS. Poster Presentation at 2021 SCEC Annual Meeting.
- 11565 Jiang, J., Erickson, B. A., Lambert, V. R., Ampuero, J., Ando, R., Barbot, S. D., Cattania, C., Dal Zilio, L., Duan, B., Dunham, E. M., Gabriel, A., Lapusta, N., Li, D., Li, M., Liu, D., Liu, Y., Ozawa, S., Pranger, C., & van Dinther, Y. (2021, 08). Community Code Verification Exercises for Simulations of Earthquake Sequences and Aseismic Slip (SEAS): Three-Dimensional Problems. Poster Presentation at 2021 SCEC Annual Meeting.
- 11566 Ruhl, C. J., Abercrombie, R. E., & Shearer, P. M. (2021, 08). Can Fault-Zone Complexity Explain Spatiotemporal Variation in Observed Stress Drops?. Poster Presentation at 2021 SCEC Annual Meeting.
- 11568 Wick, J., & Lambert, V. R. (2021, 08). Optimizing Numerical Simulations of Earthquake Sequences Including Off-Fault Viscoelastic Deformation using Hierarchical Matrices. Poster Presentation at 2021 SCEC Annual Meeting.
- 11575 Gkogkas, K., Berg, E., Lin, F., Schulte-Pelkum, V., Allam, A. A., & Qiu, H. (2021, 08). Shallow crustal structure of Southern California by jointly inverting surface wave phase velocity, Rayleigh wave ellipticity, and Receiver Functions. Poster Presentation at 2021 SCEC Annual Meeting.
- 11578 Mao, S., Lecointre, A., van der Hilst, R. D., & Campillo, M. (2021, 08). Space-Time Monitoring of Groundwater in the Coastal Los Angeles Basins via Seismic Interferometry. Poster Presentation at 2021 SCEC Annual Meeting.
- 11572 Neupane, A., Ruhl, C. J., & Abercrombie, R. E. (2021, 08). Comparison of Stress Drop Variation of M3.8-4.2 Earthquakes Between 0-12 km Depth Using Four Independent Methods on 2019 Ridgecrest, CA Data. Poster Presentation at 2021 SCEC Annual Meeting.
- 11582 Xie, S., Zumberge, M. A., & Mellors, R. (2021, 08). Earthquake strain sensing using optical fiber interferometers. Poster Presentation at 2021 SCEC Annual Meeting.
- 11574 McNeil, J. C., & Koehler, R. D. (2021, 08). Preliminary paleoseismic observations of the lone Valley Fault, Basin and Range Province, central Nevada. Poster Presentation at 2021 SCEC Annual Meeting.
- 11573 Zhou, Z., Bianco, M., Gerstoft, P., & Olsen, K. (2021, 08). High-resolution Ambient Noise Tomography of Shallow Fault Zones Along the July 2019 Ridgecrest Ruptures. Poster Presentation at 2021 SCEC Annual Meeting.
- 11579 Maechling, P. J., Su, M., Marshall, S. T., Hearn, E. H., & Montesi, L. G. (2021, 08). The SCEC Unified Community Velocity Model (UCVM) Software Models and Tools. Poster Presentation at 2021 SCEC Annual Meeting.
- 11586 Ji, C., & Archuleta, R. J. (2021, 08). Average Static Stress Drop of Crustal Earthquakes Inferred From Source Spectra. Poster Presentation at 2021 SCEC Annual Meeting.

- 11585 Ghosh, A., Zhou, Y., Niyogi, S., Mendoza, M. M., Chaudhuri, K., Wu, B., Yue, H., Fang, L., Zhou, S., & Birkey, A. (2021, 08). 2019 Ridgecrest earthquake sequence: RAPID seismic deployment and a new aftershock catalog based on machine learning. Poster Presentation at 2021 SCEC Annual Meeting.
- 11581 Legg, M. R. (2021, 08). Late Quaternary activity of the San Diego Trough fault zone offshore Northwest Baja California . Poster Presentation at 2021 SCEC Annual Meeting.
- 11587 Harvey, T., Erickson, B. A., & Kozdon, J. E. (2021, 08). Exploring the effects of a sedimentary basin on the earthquake cycle using a non-stiff finite difference method for elastodynamics. Poster Presentation at 2021 SCEC Annual Meeting.
- 11583 Anderson-Merritt, E., & Cooke, M. (2021, 08). Estimating tractions along the San Andreas and San Jacinto faults prior to ground-rupturing earthquakes of the last four centuries. Poster Presentation at 2021 SCEC Annual Meeting.
- 11595 Hough, S. E. (2021, 08). Which Earthquake Accounts Matter?. Poster Presentation at 2021 SCEC Annual Meeting.
- 11593 Elston, H. M., Cooke, M. L., Loveless, J. P., & Marshall, S. T. (2021, 08). Combining forward and inverse approaches to resolve interseismic deep slip and locking depths on closely spaced faults. Poster Presentation at 2021 SCEC Annual Meeting.
- 11594 Lozos, J. C. (2021, 08). Dynamic Rupture Simulations of Coseismic Interactions on Orthogonal Strike-Slip Faults. Poster Presentation at 2021 SCEC Annual Meeting.
- 11591 Li, Y., Catchings, R. D., & Goldman, M. R. (2021, 08). Subsurface Damage Zones of the Sinistral Faults at Ridgecrest in the Eastern California Shear Zone Characterized by Fault-Zone Trapped Waves. Poster Presentation at 2021 SCEC Annual Meeting.
- 11511 Bayliss, K., Naylor, M., Kamranzad, F., & Main, I. (2021, 08). Pseudo-prospective testing of five year time-independent California earthquake forecasts with inlabru . Poster Presentation at 2021 SCEC Annual Meeting.
- 11588 Dascher-Cousineau, K., Shchur, O., & Brodsky, E. E. (2021, 08). Towards Flexible and Scalable Earthquake Forecasting. Poster Presentation at 2021 SCEC Annual Meeting.
- 11598 Sengpiehl, S. N., Schwartz, J., Miranda, E. A., Klepeis, K. A., & Mora-Klepeis, G. (2021, 08). The Black Belt Mylonite Zone and the Role of Tectonic Inheritance in Brittle Faulting in the San Gabriel Block. Poster Presentation at 2021 SCEC Annual Meeting.
- 11599 Tung, S., Shirzaei, M., Ojha, C., Pepe, A., & Liu, Z. (2021, 08). Structural Controls Over the 2019 Ridgecrest Earthquake Sequence Investigated by High-Fidelity Elastic Models of 3D Velocity Structures. Poster Presentation at 2021 SCEC Annual Meeting.
- 11600 Ramos, L. G., & Kenawy, M. (2021, 08). Predicting Damage to Steel Rebar in Reinforced Concrete Structures Subjected to Earthquake Loading. Poster Presentation at 2021 SCEC Annual Meeting.
- 11604 Denolle, M. A., Clements, T., & Lermert, L. (2021, 08). When Water, Temperature, and Earthquakes impact shallow seismic velocities: Decadal records in California and Mexico City . Poster Presentation at 2021 SCEC Annual Meeting.
- 11605 Woo, J. (2021, 08). Kinematic rupture model for the 2017 Mw 5.5 Pohang, South Korea, earthquake. Poster Presentation at 2021 SCEC Annual Meeting.
- 11607 Hough, S. E. (2021, 08). The 2021 Nippes, Haiti, Earthquake. Oral Presentation at 2021 SCEC Annual Meeting.
- 11611 Chen, M., Tobar, C., & Breuer, A. N. (2021, 08). Evaluating Seismic Hazard Using Large Scale Ground Motion Simulations. Poster Presentation at 2021 SCEC Annual Meeting.
- 11616 Devine, S. C., & Marshall, S. T. (2021, 08). Mechanical Modeling Faulting in the Transverse and Peninsular Ranges of Southern California. Poster Presentation at 2021 SCEC Annual Meeting.

- 11614 Barbery, M. R., Chester, F. M., & Chester, J. S. (2021, 08). Investigating the influence of mm-scale contact processes on dynamic weakening in high-speed rock friction experiments. Poster Presentation at 2021 SCEC Annual Meeting.
- 11597 Chu, S., Tsai, V. C., Trugman, D. T., & Hirth, G. (2021, 08). Fault interactions enhance high-frequency earthquake radiation. Poster Presentation at 2021 SCEC Annual Meeting.
- 11624 Herrmann, M., Piegari, E., & Marzocchi, W. (2021, 08). b-value of what? Complex behavior of the magnitude distribution during and within the 2016/17 Central Italy sequence. Poster Presentation at 2021 SCEC Annual Meeting.
- 11621 Gabriel, A., Elbanna, A. E., & Ben-Zion, Y. (2021, 08). High-performance computing and multi-physics earthquake modeling towards next generation earthquake simulations. Poster Presentation at 2021 SCEC Annual Meeting.
- 11623 Burkett, F. E. (2021, 08). Geomorphic Indicators of Neotectonic Activity along the Santa Ynez fault, in Santa Barbara County, CA. Poster Presentation at 2021 SCEC Annual Meeting.
- 11622 SINGH, R. P., Jing, F., & He, A. (2021, 08). Pronounced Recharge and Discharge Phase Ground water in the Epicentral Region Caused Madoi (China) M 7.3 earthquake of 21 May 2021. Poster Presentation at 2021 SCEC Annual Meeting.
- 11625 Muir, J. B., Clayton, R. W., Tsai, V. C., & BRISSAUD, Q. (2021, 08). Parsimonious velocity inversion applied to the Los Angeles Basin, CA. Poster Presentation at 2021 SCEC Annual Meeting.
- 11626 Yeh, T., & Olsen, K. B. (2021, 08). 3D wave propagation simulations of the 2019 M7.1 Ridgecrest, CA, Earthquake. Poster Presentation at 2021 SCEC Annual Meeting.
- 11618 Ray, S., & Garagash, D. I. (2021, 08). Aseismic slip on rate-weakening interfaces. Poster Presentation at 2021 SCEC Annual Meeting.
- 11549 Sheehan, J., & Sahakian, V. J. (2021, 08). Evaluating Source and Site Effects in Peak Ground Displacement Models for Earthquake Magnitude Calculation. Poster Presentation at 2021 SCEC Annual Meeting.
- 11617 Li, Y., & Bürgmann, R. (2021, 08). Spatiotemporal variations of surface deformation, shallow creep rate and slip partitioning between the San Andreas and southern Calaveras faults constrained by InSAR. Poster Presentation at 2021 SCEC Annual Meeting.
- 11629 Share, P., Qiu, H., Chi, B., Vernon, F. L., Fialko, Y., Vavra, E., Allam, A. A., & Ben-Zion, Y. (2021, 08). General seismic architecture of the Southern San Andreas fault zone around the Thousand Palms Oasis from a Large-N nodal array. Poster Presentation at 2021 SCEC Annual Meeting.
- 11628 Paroissien-Arce, K. A., Nye, T., & Sahakian, V. J. (2021, 08). Linking sediment strength and earthquake shaking to understand the Cascadia Subduction Zone paleoseismic record. Poster Presentation at 2021 SCEC Annual Meeting.
- 11630 Rubino, V., Tal, Y., Rosakis, A. J., & Lapusta, N. (2021, 08). Experimental study of frictional shear resistance under rapid variations of normal stress and near-field ground motion of thrust earthquakes. Poster Presentation at 2021 SCEC Annual Meeting.
- 11635 Wu, Q., & Chen, X. (2021, 08). Source complexity of small and moderate earthquakes in the 2019 Ridgecrest earthquake sequence. Poster Presentation at 2021 SCEC Annual Meeting.
- 11636 Roten, D., Olsen, K. B., Day, S. M., & Cui, Y. (2021, 08). Verification of Iwan-type Plasticity in the Discontinuous-Mesh GPU-powered Wave Propagation Code AWP. Poster Presentation at 2021 SCEC Annual Meeting.
- 11639 Abercrombie, R. E., & Calderoni, G. (2021, 08). Brune stress drop, fault slip distribution and high frequency radiation during the 2016-2018 Amatrice-Visso-Norcia seismic sequence. Poster Presentation at 2021 SCEC Annual Meeting.

- 11638 Liu, S., Heimisson, E. R., & Lapusta, N. (2021, 08). The importance of poroelastic effects in models of injection-induced slip on rate-and-state faults . Poster Presentation at 2021 SCEC Annual Meeting.
- 11649 Sangha, S. S., Funning, G. J., & Bekaert, D. (2021, 08). The distribution of shallow creep on active faults in California, from a deformation velocity field derived from Sentinel-1 ARIA standard product interferograms. Poster Presentation at 2021 SCEC Annual Meeting.
- 11648 Dvory, N. Z., Yang, Y., & Dunham, E. M. (2021, 08). Rate-and-state modeling of injection-induced aseismic slip in the Delaware Basin. Poster Presentation at 2021 SCEC Annual Meeting.
- 11633 Shen, W., Sui, S., Bahadori, A., Holt, W. E., Kim, J., & Campbell, L. (2021, 08). A 3-D crustal compositional model of S. California and its implications on the instantaneous stress state of the lithosphere. Poster Presentation at 2021 SCEC Annual Meeting.
- 11651 Fei, F., Mia, M., Elbanna, A. E., & Choo, J. (2021, 08). Phase-field modeling of rate- and state-dependent frictional faults. Poster Presentation at 2021 SCEC Annual Meeting.
- 11646 Wittich, C., & Saifullah, M. (2021, 08). Shake Table Tests and Numerical Modeling for Precarious Rock Fragilities. Poster Presentation at 2021 SCEC Annual Meeting.
- 11654 Su, M., Maechling, P. J., Pauk, E., Huynh, T. T., Marshall, S. T., Floyd, M., Hearn, E. H., & Montesi, L. G. (2021, 08). Improving web-based access tools for the SCEC Community Models. Poster Presentation at 2021 SCEC Annual Meeting.
- 11656 Hudson, K. S., Zimmaro, P., Brandenberg, S. J., & Stewart, J. P. (2021, 08). Laboratory Component of Next Generation Liquefaction Database and System Analysis of Important Case Histories. Poster Presentation at 2021 SCEC Annual Meeting.
- 11655 Rockwell, T. K., Akciz, S. O., & Gath, E. M. (2021, 08). New age data constrain the recurrence interval on the Whittier fault. Poster Presentation at 2021 SCEC Annual Meeting.
- 11658 Oglesby, D. D., Wu, B., Kyriakopoulos, C., & Ryan, K. J. (2021, 08). The effects of Absolute Friction Level on Shallow Fault Dynamics. Poster Presentation at 2021 SCEC Annual Meeting.
- 11657 Zhang, Y., Yu, H., Zhang, S., Liu, Y., Wang, H., Zhang, X., Yu, C., Yuan, Z., Hu, C., Liu, G., Zheng, J., Zhong, J., Li, G., Zhang, X., Liu, X., Cui, Z., Zou, Z., Zhang, Z., Cui, H., Li, D., Li, G., Fan, X., & Dai, Z. (2021, 08). Progress of CSEP China. Poster Presentation at 2021 SCEC Annual Meeting.
- 11642 Husker, A. L., Werner, M. J., & Santoyo, M. (2021, 08). A Test of the Earthquake Gap Hypothesis in Mexico. Poster Presentation at 2021 SCEC Annual Meeting.
- 11643 Methvin, M. R., Pham, D. D., Kyriakopoulos, C., & Webb, A. (2021, 08). Engaging students using virtual reality for earthquake science: first-impressions from in-person and remote collaboration. Poster Presentation at 2021 SCEC Annual Meeting.
- 11663 Onderdonk, N. W., Kelty, C., McGregor, I., & Tutterow, E. (2021, 08). Changes in rock uplift rates and fault slip rates over the past 125 ky in the western Transverse Ranges. Poster Presentation at 2021 SCEC Annual Meeting.
- 11641 Tymofyeyeva, E., Floyd, M., Bekaert, D., Funning, G. J., Guns, K. A., Liu, Z., Materna, K., Sandwell, D. T., Wang, K., & Xu, X. (2021, 08). Community Geodetic Model: Current status of the consensus InSAR model for deformation time series and velocities in Southern California. Poster Presentation at 2021 SCEC Annual Meeting.
- 11661 McLaskey, G. C., Cebry, S. B., Ke, C., Shreedharan, S., Marone, C. J., & Kammer, D. S. (2021, 08). Creep fronts and asperity interactions in laboratory earthquake sequences illuminate delayed earthquake triggering. Poster Presentation at 2021 SCEC Annual Meeting.
- 11666 Williams, A. M., seitz, g. G., Rockwell, T. K., Cook, D. K., & Arrowsmith, R. (2021, 08). Earthquake Chronology of the Parkfield-Cholame Transition Zone: San Andreas Fault. Poster Presentation at 2021 SCEC Annual Meeting.

- 11662 Bilham, R., Langbein, J. O., Ericksen, T. L., Nevitt, J. M., Brooks, B. A., & Mencin, D. J. (2021, 08). Fault-zone gas venting and aseismic slip: ventilation or lubrication?. Poster Presentation at 2021 SCEC Annual Meeting.
- 11718 Baker, J. W., & Chen, Y. (2022, 07). Spatial correlation analysis of CyberShake simulations, considering multiple ruptures. Oral Presentation at 12th National Conference on Earthquake Engineering.
- 11724 Lee, Y., Goulet, C. A., Hu, Z., Milner, K. R., & Callaghan, S. (2021, 03). Impacts of CyberShake on Risk Assessments for Distributed Infrastructure Systems. Poster Presentation at 2021 EERI Annual Meeting.
- 11727 Wang, Y., & Goulet, C. A. (2021, 11). Constraining Fault Displacements for Strike-slip Events using Physics-Based Simulations. Oral Presentation at the 12th National Conference on Earthquake Engineering.
- 11805 Kilb, D., Schulte-Pelkum, V., Becker, T. W., Behr, W. M., & Miller, M. S. (2021). Past and Present Deformation along the San Andreas from Microseismicity, Geodesy, and Seismological Constraints. Oral Presentation at AGU.
- 11807 Sheng, Y., Kong, Q., & Beroza, G. C. (2019, 12). Network Analysis to Characterize Seismic Ground Motion Spatial Variability: A Case study on the San Jacinto Seismic Array. Oral Presentation at American Geophysical Union.
- 11821 Taira, T., Abercrombie, R. E., & Baltay, A. S. (2021, 12). Introduction to the SCEC Community Stress Drop Validation Study. Poster Presentation at 2021 AGU Fall Meeting, 13 – 17 December.
- 11823 Baltay, A. S., Abercrombie, R. E., & Taira, T. (2021, 10). Introduction to the SCEC Community Stress Drop Validation Study. Oral Presentation at 2021 Virtual SSJ Annual Meeting, 14-16 October.
- 11825 Baltay, A. S., Abercrombie, R. E., & Taira, T. (2021, 04). A Community Stress Drop Validation Study using the 2019 Ridgecrest Earthquake Dataset. Poster Presentation at 2021 Virtual SSA Annual Meeting, April 19 - 23.
- 11826 Chen, X., & Wu, Q. (2021, 12). Stress drop validation and triggering process of foreshocks in Southern California. Poster Presentation at 2021 Fall Meeting, AGU.

Book Chapter or Report Chapter (2)

- 7202 Ampuero, J., & Mao, X. (2017). Upper Limit on Damage Zone Thickness Controlled by Seismogenic Depth. In H. S. Bhat, T. M. Mitchell, & M. Y. Thomas (Eds.), *Geophysical Monograph Series*, (, pp. 243-253) Hoboken, USA: John Wiley & Sons, Inc.
- 8135 Li, Y. (2016). Seismic wave propagation in anisotropic rocks with applications to defining fractures in earth crust. *Rock anisotropy, fracture and earthquake assessment*, (Chapter 1, pp. 11-141) Beijing and Boston, China and USA: China High Education Press with De Gruyter

Book or Non-Periodical, One-Time Publication (8)

- 7919 Branum, D., Harmsen, S., Kalkan, E., Petersen, M. D., & Wills, C. J. (2008). *Earthquake Shaking Potential for California. Mapsheet 48 (Revised 2008)*. , : California Geological Survey.
- 8082 Kagan, Y. Y. (2013). *EARTHQUAKES: Models, Statistics, Testable Forecasts*. Hoboken, USA: Wiley/AGU.
- 8136 Li, Y. (2017). *Fault-Zone Guided Wave, Ground Motion, Landslide and Earthquake Forecast (pp232)*. Beijing and Boston, China and USA: China High Education Press with De Gruyter.
- 9100 Li, Y. (2019). *Earthquake and Disaster Risk: Decade Retrospective of the Wenchuan Earthquake (1st)*. Singapore, Singapore: Springer Singapore.

- 9137 Li, Y., Su, J., Chen, T., & Wu, P. (2019). Structural Relationship Between the 2008 M8 Wenchuan and 2013 M7 Lushan Earthquakes Viewed by Fault-Zone Trapped Waves (1st). Singapore, Singapore: Springer Singapore.
- 10051 Burgette, R. J., Scharer, K. M., & Lindvall, S. C. (2020). Late Quaternary slip rates on the Sierra Madre fault zone and paleoseismic evidence on the size and frequency of past ruptures. , : Geological Society of America.
- 10071 Legg, M. R. (2021). Evolution of a continental margin transform plate boundary: the San Clemente fault system offshore southern California, (in preparation).
- 10965 Nweke, C., Stewart, J. P., & Brandenburg, S. J. (2020). Site Response of Southern California Sedimentary Basins and Other Geomorphic Provinces. Los Angeles, US: Natural Hazards Risk and Resiliency Research Center, B. John Garrick Institute for the Risk Sciences, UCLA .

Thesis or Dissertation (6)

- 8964 Soundy, K. L. (2018). Fault-Core Microtextures And Slip Rate Of The West Salton Detachment Fault, Southern California (New Mexico Institute of Mining and Technology, Socorro).
- 9026 Lin, J. C. (2018). Geomorphic Controls on Vs30 Distribution in southern California (University of California, Los Angeles, Los Angeles).
- 10078 Helgans, E. C. (2019). Multicomponent Model of Crustal Stress at Cajon Pass, Southern California with Implications for Stress Field Heterogeneity (Louisiana State University).
- 10099 Singleton, D. M. (2020). Neotectonics in San Diego, California: Paleoseismology, Slip Rate, and Offshore Structure of the Rose Canyon Fault (UC San Diego & San Diego State University, San Diego).
- 10776 Scott, T. R. (2020). Rock Traits from Machine Learning: Application to Rocky Fault Scarps (Arizona State University).
- 10952 Kain, J. O. (2021). Insight into the Stress Field of the Southern Los Angeles Basin, California Determined from Borehole Breakout and Drilling Induced Fracture Analysis (Louisiana State University, Baton Rouge).