ANDREA DONNELLAN, PH.D.

PURDUE UNIVERSITY, ANDREAD@PURDUE.EDU

Education

1991	Ph.D., Geophysics, California Institute of Technology
2003	M.S., Computer Science, University of Southern California
1988	M.S., Geophysics, California Institute of Technology
1986	B.S., Geology, Ohio State University, *with honors and distinction in geology and minor in math*

History of Employment

2025 – Present	Purdue University
2025 – Present	Professor and Head Earth, Atmospheric, and Planetary Sciences
1993 – 2024	NASA Jet Propulsion Laboratory, California Institute of Technology
2021 – 2024	Manager Instrument Systems Section
2024 – 2024	Senior Research Scientist
2008 – 2024	Principal Research Scientist
2009 – 2011	NASA HQ Program Area Co-Lead for Natural Disasters
2005 – 2008	InSAR Lead Scientist/Pre-Project Scientist
2002 – 2005	Deputy Manager Science Division
2000 – 2002	Deputy Manager Exploration Systems Autonomy Section
1999 – 2000	Supervisor Data Understanding Systems Group
1993 – 1999	Member Satellite Geodesy and Geodynamics Systems Group
2018	California State Polytechnic University, Pomona
2018	Adjunct Professor, Lecturer Geosciences
1991 – 1993	National Research Council
1991 – 1993	Postdoctoral Fellow, NASA Goddard Space Flight Center
1986 – 1991	California Institute of Technology
1986 – 1991	Research Assistant, Seismological Laboratory
1988	Teaching Assistant, Seismological Laboratory
1983 – 1986	Ohio State University
1983 – 1986	Research Assistant, Institute for Polar Studies
1983	Thin Section Laboratory Technician
1985	Sohio Research and Development
1985	Geochemistry Group

Visiting Appointments

2025 – Present	Distinguished Visiting Scientist, NASA Jet Propulsion Laboratory
1999 – 2015	University of Southern California, Adjunct Asst. Professor (Research) Earth Science
1995 – 1996	California Institute of Technology, Visiting Associate, Seismological Laboratory

Research Experience

Study earthquakes, fault slip, and crustal deformation combining a variety of geodetic imaging techniques with modeling. Lead NASA's Surface Topography and Vegetation Study to incubate a mission for the 2035 timeframe and principal investigator of the QUAKES airborne stereoimaging instrument suite. Served on the NISAR science team and led development of the first versions of the science definition document and NISAR Handbook. Led NASA's GeoGateway and QuakeSim projects for over twenty years. Using GNSS, InSAR, stereo imagery modeled pre-, co-, and post-earthquake slip and triggered slip dating to the earliest crustal deformation data collected using GPS and was key to establishing the Southern California Integrated GPS Network (SCIGN), which became the Plate Boundary Observatory and is now the Network of the Americas.

Research Products

2026	Airborne Surface, Cryosphere, Ecosystem, and Nearshore Topography (ASCENT) 2026 California Campaign using two Gulfstream aircraft to fly radar, lidar, and stereoimaging instruments
2021 & 2022	QUAKES-I airborne imaging data and 3D products for Grand Canyon, Lake Mead, and Numerous Locations over California
2021 & 2022	SAR-Fusion short wavelength infrared (SWIR) and visible stereoimaging products (2021 Caldor Fire, 2022 Mauna Loa eruption)
2012 – present	GeoGateway (http://geo-gateway.org) for analysis of geodetic imaging data. Underlying software used in NISAR mission calibration/validation using UAVSAR and GNSS data. Currently being migrated from Indiana University to Purdue.
2021 – present	NASA Surface Topography and Vegetation Study Lead:
2021	Observing Earth's Changing Surface Topography and Vegetation Structure: A Framework for the Decade
2018	NASA-ISRO SAR (NISAR) Mission Science Users' Handbook Chief Editor

Service Roles

Professional Organizations

American Geophysical Union

2026	Diversity and Inclusion Award Selection Committee
2020	AGU Honors Ambassador Committee Chair
2020	AGU Honors committee chair for Natural Hazards Section
2017 – 2018	Diversity and Inclusion Task Force
2013 – 2018	Nonlinear Geophysics Focus Group President-Elect/President/Past
2016 – 2017	Ethics Task Force

American Association for the Advancement of Science

2026	Membership Engagement Chair Geology and Geography (Section E)

IEEE

2024 – present	The Remote Sensing Environment, Analysis and Climate Technologies Technical Committee (REACT TC)

EarthScope

2026	Board Nominating Committee

UNAVCO

2018 – 2020	Board, Vice-Chair (2019–2020)

APEC Cooperation on Earthquake Simulation (ACES)

2000 – 2017	US Rep. to the International Science Board

Natl. Academy of Sciences

2010	Committee on Spatial Data Enabling USGS Strategic Science in the 21st Century

Editor

2014 – 2021	AGU Earth and Space Science Journal
2013 – 2014	PAGEOPH Topical Vol. editor: "Multihazard Simulation and Cyberinfrastructure
2012 – 2014	ISRN Geophysics, Editorial Board
2003	Editor ACES PAGEOPH special volume on earthquake simulations

Programmatic

NASA

2024-2026	Earth Surface and Interior Program Challenges and Opportunities for Earth Surface and Interior (CORE) Steering committee member

2015-2016	Earth Surface and Interior Program Challenges and Opportunities for Earth Surface and Interior (CORE) Steering committee member
2009-2011	NASA HQ Program Area Co-Lead for Natural Disasters Responsible for program elements and strategic direction of program Represented NASA on the White House Subcommittee for Disaster Reduction Ex-officio member representing NASA, National Academy of Sciences Disaster Roundtable

NASA and NSF

2005 – present	Proposal review panels

Convener

NASA Surface Topography and Vegetation (STV) Study

2020, – present	Community Meetings 2020, 2023, 2024, 2026
2020	American Geophysical Union STV Town Hall
2022 – 2026	American Geophysical Union STV Sessions
2024 – 2026	International Geosciences and Remote Sensing Society (IGARSS) STV Sessions

Seismological Society of America

2026	Advances in observation and analysis of topography and deformation: research and future opportunities relating earthquakes to cascading hazards
2018	Analyzing Geodetic Imaging Data using GeoGateway Short Course, Seattle, WA
2007 – present	Special sessions 2018 – 2020

Keck Institute for Space Studies (KISS)

2014	Gazing at the Solar System: Capturing the Evolution of Dunes, Faults, Volcanoes and Ice from Space, Pasadena, CA

NASA

2010	Earth Observing Missions Applications Workshop, Colorado Springs, CO
2008	DESDynI Applications Workshop, Sacramento, CA

NSF/NASA

2008	Community InSAR Workshop (Oxnard, 2003)
1999	Autonomous Systems in Extreme Environments Workshop (1999)
1995, 1997	Southern California Integrated GPS Network (SCIGN) network design workshops

APEC Cooperation on Earthquake Simulation (ACES)

2002 – 2015	ACES international workshops #3 – 9, Maui, China, Japan, Australia

Research Funding (Past 10 years, All NASA, Principal Investigator unless noted)

2026 – 2029	Creating a NASA Surface Topography and Vegetation (STV) Novel Observing System (NOS) (selected, partially funded)
2019 – 2028	NASA Surface Topography and Vegetation Study Lead
2025 – 2028	Examining the extent and triggering of fault creep in the Salton Trough using UAVSAR, GNSS, and creepmeter data (Co-I, PI E. Tymofyeyeva)
2022 –2025	High-Resolution Stereophotogrammetry and Analysis for Achieving STV DSI Goals
2022 –2025	NISAR Solid Earth Science Team Member: Calibration and Validation using UAVSAR and GNSS
2019 – 2022	NISAR Calibration and Validation for Solid Earth and Applications
2020 –2021	Quantifying Uncertainty and Kinematics of Earthquake Systems (QUAKES-A) Analytic Center
2020 – present	Quantifying Uncertainty and Kinematics of Earth Systems Imager (QUAKES-I)

2019 – 2020	SAR and InSAR Training Materials for the Earth Surface and Interior Community (Co-I. PI P. Rosen)
2019 – 2024	SAR-Fusion Imager
2017 –2020	Connecting Plate Boundary Processes to Surface Faulting using Geodetic Imaging
2016 –2019	Enhanced Access to NASA Heterogeneous Geodetic Imaging Products through GeoGateway Analysis, Modeling, and Response Tools
2017 – 2019	Excitation and Detection of Tsunamis by the Global Navigation Satellite System, (Co-I, PI J. Rundle)

Selected Honors (28 total)

Distinguished Visiting Scientist, NASA Jet Propulsion Laboratory (2025 – present)
Fellow, American Geophysical Union (2021)
Fellow, American Association for the Advancement of Science (2020)
JPL Voyager Award for Lead of NASA's Surface Topography and Vegetation Incubation Study (2020)
JPL Voyager Award for Chief Editor NISAR Handbook (2018)
QuakeSim 2.0: NASA Software of the Year Award (2012)
MUSES California Science Center Foundation, Woman of the Year (2006)
Women in Aerospace Award for Outstanding Achievement (2003)
Presidential Early Career Award for Scientists and Engineers (1996)
NASA Group Achievement Award for *Response to the 2015 Nepal Gorkha Earthquake* (2016)
NASA Group Achievement Award for *Response to the 2010 Gulf Oil Spill* (2011)
NASA Space Act Awards for software (2004 (3), 2005, 2009, 2012)
JPL Lew Allen Award for Excellence (2000)
Donnellan Glacier named by Advisory Comm. on Antarctic Names (2006)
Women at Work Medal of Excellence (2004)

Memberships

American Geophysical Union (1986–present), Fellow
American Association for the Advancement of Science (2016–present), Fellow
Seismological Society of America (2000–2003, 2012, 2015–present)
IEEE Senior Member, and IEEE Geoscience and Remote Sensing Society (2016–present)
The Explorers Club (2012–present), Fellow National

Certifications

2015 – present	FAA certified small UAS pilot
2015 – present	NASA certified small UAS pilot and ground control operator
1996 – present	FAA Commercial instrument single engine land and sea plane pilot (~500 hours): Flights in the US, Mexico, Canada, and Africa (last flight review 2020)
2003 – present	PADI Open Water scuba diver: Dives include Thailand, California, Hawaii, Palau, Australia, and Caribbean

Mentoring

Purdue University	
2025 – 2026	Postdoctoral Associate: Carolina Hurtado Pulido
2026 –	PhD Student: Ashkar Rahman Aquib
2026 -	BS Student: Aksel Veak

Jet Propulsion Laboratory

15 mentees, IEEE, Caltech Alumni, JPL, Informal

18 interns

3 summer faculty fellows

11 graduate students, NASA graduate student fellows (5), project funded (6)

2 Postdocs, NASA Fellowship (1), SCEC fellowship (1)

Media Appearances

~75 media appearances in print, radio, TV, video, press conferences, or documentaries ranging from local to international

Peer-Reviewed Publications

[1] Rundle, J.B., Baughman, I., Donnellan, A., Grant Ludwig, L., Fox, G. and Nanjo, K., 2026. Exceedance Probabilities for Large Earthquakes from DIY Local Earthquake Ensemble Nowcasting and Forecasting: Magnitude, Natural Time, and Calendar Time. GeoHazards, 7(2), p.78.

[2] Rundle, J.B., I. Baughman, **A. Donnellan**, L. Grant Ludwig, G.C. Fox, 2026, From Local Earthquake Nowcasting to Natural Time Forecasting: A Simple Do-It-Yourself (DIY) Method, Earth and Space Science, https://doi.org/10.1029/2025EA004820.

[3] Rundle, J.B., Fox, G.C., **Donnellan, A.** and Ludwig, L.G., 2025. Nowcasting earthquakes with QuakeGPT: Methods and first results. In Scientific Investigation of Continental Earthquakes and Relevant Studies (pp. 113-138). Singapore: Springer Nature Singapore.

[4] **Donnellan, A.**, Padgett, C., Green, J., Zinke, R., Applegate, R., Chao, R., Tighe, K., Aghazarian, H., Kogan, D., Assad, C. and Bell, S., 2025. The QUAKES-I stereoimaging instrument for measuring surface topography and land surface processes. Earth and Space Science, 12(9), p.e2024EA004001.

[5] Stack, K.M., Francis, R., Calef, F.J., Gwizd, S.J., Schroeder, J.F., Voigt, J.R., Kristinsson, T., Schroedl, P., Shah, J., Varnam, M. Neish, R.P. Perkins, S. Vanga, M.S. Bramble, **A. Donnellan**, J.T. Osterhout, M. Tuite, B.B. Carr, and, C.W. Hamilton, 2025. Simulating Science Operations for a Joint Rover-helicopter Mission Architecture in a Mars Analog Setting. The Planetary Science Journal, 6(7), p.173.

[6] Zinke, R., **Donnellan, A.**, Varugu, B., Fielding, E.J., Borsa, A. and Chapman, B., 2024, July. UAVSAR for NISAR Solid Earth Calibration and Validation. In IGARSS 2024-2024 IEEE International Geoscience and Remote Sensing Symposium (pp. 6678-6680). IEEE.

[7] Jafari A., G. Fox, J. Rundle, **A. Donnellan**, L. Grant Ludwig (2024), Time Series Foundation Models and Deep Learning Architectures for Earthquake Temporal and Spatial Nowcasting, Geohazards, https://doi.org/10.3390/geohazards5040059.

[8] Jafari, A., G. Fox, J. Rundle, **A. Donnellan**, L. Grant Ludwig (2024), Time Series Foundation Models and Deep Learning Architectures for Earthquake Temporal and Spatial Nowcasting, Geohazards, https://doi.org/10.3390/geohazards5040059.

[9] Rundle, J.B., **Donnellan, A.,** Fox, G., Ludwig, L.G. and Crutchfield, J., 2023. Does the Catalog of California Earthquakes, with Aftershocks Included, Contain Information about Future Large Earthquakes? Earth and Space Science, 10(2), p.e2022EA002521.

[10] Rundle, J.B., **Donnellan, A.**, Fox, G. and Crutchfield, J.P., 2022. Nowcasting earthquakes by visualizing the earthquake cycle with machine learning: A comparison of two methods. Surveys in Geophysics, 43(2), pp.483-501.

[11] Rundle, J.B., Y. Yazbeck, **A. Donnellan**, G. Fox, L. Grant Ludwig, M. Heflin, J. Crutchfield, 2022, Optimizing Earthquake Nowcasting with Machine Learning: The Role of Strain Hardening in the Earthquake Cycle, Earth and Space Scence

[12] **Donnellan, A.**, J. Suarez, D. Asimaki, C. Goulet, D. McPhillips, Z. Meng, S. Devine, G. Lyzenga, 2022, Toppling of Trona Pinnacles in the 2019 Ridgecrest Earthquake Sequence and subsequent M5.6 Aftershock of June 2020, Seismological Research Letters.

[13] Fox, G.C., Rundle, J.B., **Donnellan, A.** and Feng, B., 2022. Earthquake nowcasting with deep learning. Geohazards, 3(2), pp.199-226.

[14] Grzan, D., Ward, S., Wilson, J.M., Rundle, J.B. and **Donnellan, A.**, 2022. Tsunami Squares Implementation Changes to Improve Wave Resolution and Accuracy. Authorea Preprints.

[15] Granat, R., **A. Donnellan**, M. Heflin, G. Lyzenga. M. Glasscoe, J. Parker, M. Pierce, J. Wang, J. Rundle, L. Grant Ludwig, 2021, Clustering Analysis Methods for GNSS Observations: A Data-Driven Approach to Identifying California's Major Faults, Earth and Space Science, DOI: 10.1029/2021EA001680.

[16] Rundle, J.B., Donnellan, A., Fox, G. and Crutchfield, J.P., 2021. Nowcasting Earthquakes by Visualizing the Earthquake Cycle with Machine Learning: A Comparison of Two Methods. Surveys in Geophysics, pp.1-19.

[17] Grzan, D.P., Rundle, J.B., Wilson, J.M., Song, T., Ward, S.N. and Donnellan, A., 2021. Tsunami Squares: Earthquake driven inundation mapping and validation by comparison to the Regional Ocean Modeling System. Progress in Disaster Science, p.100191.

[18] Goulet, C.A., Wang, Y., Nweke, C.C., Tang, B.X., Wang, P., Hudson, K.S., Ahdi, S.K., Meng, X., Hudson, M.B., Donnellan, A. and Lyzenga, G.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), pp.2317-2333. https://doi.org/10.1785/0120200222.

[19] Parker. J, **A. Donnellan**, R. Bilham, L Grant Ludwig, J. Wang, M. Pierce, N. Mowery, S. Janecke, 2021, Buried Aseismic Slip and Off-Fault Deformation on the Southernmost San Andreas Fault Triggered by the 2010 El Mayor Cucapah Earthquake Revealed by UAVSAR, Earth and Space Science, DOI:10.1029/2021EA001682.

[20] Saylor, C., Rundle, J.B. and Donnellan, A., 2021. Multifractal Analysis of a Seismic Moment Distribution Obtained From InSAR Inversion. Earth and Space Science, 8(9), p.e2020EA001433.

[21] Simons, M., Bekaert, D., Borsa, A., Donnellan, A., Fielding, E., Jones, C., Lohman, R., Lu, Z., Meyer, F., Owen, S. and Rosen, P.A., 2021, July. Nisar Requirements and Validation Approach for Solid Earth Science. In 2021 IEEE International Geoscience and Remote Sensing Symposium IGARSS (pp. 543-546). IEEE.

[22] Rundle, J.B., S. Stein, **A. Donnellan**, D.L. Turcotte, W. Klein, C. Saylor, 2021, The Complex Dynamics of Earthquake Fault Systems: New Approaches to Forecasting and Nowcasting of Earthquakes, Reports on Progress in Physics, https://doi.org/10.1088/1361-6633/abf893.

[23] Parker, J., **A. Donnellan**, R. Bilham, L. Grand Ludwig, J. Wang, M. Pierce, N. Mowry, S. Jänecke, 2021, Buried Aseismic Slip and Off-Fault Deformation on the Southernmost San Andreas Fault triggered by the 2010 El Mayor Cucapah Earthquake revealed by UAVSAR, Earth and Space Science, DOI: 10.1029/2021EA001682.

[24] Parker, J. **A. Donnellan**, M. Glasscoe, 2021, Survey of Transverse Range Fire Scars in Ten Years of UAVSAR Polarimetry, Earth and Space Science, doi: 10.1029/2021EA001644.

[25] Milliner, C., **A. Donnellan**, S.Aati, J-P. Avouac, R. Zinke, J. Dolan, K. Wang, R. Bürgmann, 2021, Bookshelf Kinematics and the Effect of Dilatation on Fault Zone Inelastic Deformation: Examples from Optical Image Correlation Measurements of the 2019 Ridgecrest Earthquake Sequence, J. Geophys. Res., DOI: 10.1029/2020JB020551.

[26] **Donnellan, A.**, 2021, Remote Sensing of Deformation and Disturbance to Monitor and Assess Infrastructure in Urban Environments. In: Singhroy, V. (eds) Advances in Remote Sensing for Infrastructure Monitoring. Springer Remote Sensing/Photogrammetry. Springer, Cham. https://doi.org/10.1007/978-3-030-59109-0_6.

[27] **Donnellan, A.**, J. Parker, M. Heflin, M. Glasscoe, G. Lyzenga, M. Pierce, J. Wang, J. Rundle. L. Grant Ludwig, R. Granat, M. Mirkhanian, N. Pulver, 2021, Improving Access to Geodetic Imaging Crustal Deformation Data Using GeoGateway, Earth Science Informatics, DOI: 10.1007/s12145-020-00561-7.

[28] **Donnellan, A.,** G. Lyzenga, A. Ansar, C. Goulet, J. Wang, M. Pierce, 2020, Targeted High-Resolution Structure from Motion Observations over the M6.4 and M7.1 Ruptures of the Ridgecrest Earthquake Sequence, Seismological Research Letters, XX, 1–9, doi: 10.1785/0220190274.

[29] Rundle, J.B., **A. Donnellan**, 2020, Nowcasting Earthquakes in Southern California with Machine Learning: Bursts, Swarms and Aftershocks May Be Related to Levels of Regional Tectonic Stress, Earth and Space Science, doi: 10.1029/2020EA001097.

[30] Milliner, C. and **Donnellan, A.**, 2020. Using Daily Observations from Planet Labs Satellite Imagery to Separate the Surface Deformation between the 4 July M w 6.4 Foreshock and 5 July Mw 7.1 Mainshock during the 2019 Ridgecrest Earthquake Sequence. Seismological Research Letters, doi: 10.1785/0220190271.

[31] Brandenberg, S.J., Stewart, J.P., Wang, P., Nweke, C.C., Hudson, K., Goulet, C.A., Meng, X., Davis, C.A., Ahdi, S.K., Hudson, M.B., **Donnellan, A.**, Lyzenga, G., Pierce, M., Wang, J., Winters, M.A., Delisle, M-P., Lucey, J., Kim, Y., Gallien, T.W., Lyda, A., Yeung, J.S., Issa, O., Buckreis, T., Yi, Z., 2020, Ground Deformation Data from GEER Investigations of Ridgecrest Earthquake Sequence, Seismological Research Letters, https://doi.org/10.1785/0220190291.

[32] Share, P-E., P. Táborík, P. Štěpančíková, J. Stemberk, T.K. Rockwell, A. Wade, J.R. Arrowsmith, **A. Donnellan**, F.L. Vernon, and Y. Ben-Zion, 2020, Characterizing the uppermost 100 m structure of the San Jacinto fault zone southeast of Anza, California, through joint analysis of geologic, topographic, seismic and resistivity data, Geophysical Journal International.

[33] Ponti, D.J., J.L. Blair, C.M. Rosa, K. Thomas, A.J. Pickering, S, Akciz, S, Angster, J-P. Avouac, J. Bachhuber, S. Bacon, S. Bennett, K. Blake, S. Bork, B. Brooks, T. Bullard, P Burgess, C. Chupik, T. Dawson, M. DeFrisco, J. Delano, S. DeLong, J. Dolan, **A. Donnellan**, C. DuRoss, T. Ericksen, E. Frost, G. Funning, R. Gold, N. Graehl, C. Gutierrez, E. Haddon, A. Hatem, J. Helms, J. Hernandez, C. Hitchcock, P. Holland, K. Hudnut, K. Kendrick, R. Koehler, O. Kozaci, T. Ladinsky, R. Leeper, C. Madugo, M. Mareschal, J. McDonald, D. McPhillips, C. Milliner, D. Mongovin, A. Morelan, J. Nevitt, M. O'Neal, B. Olson, M. Oskin, S. Padilla, J. Patton, B. Philibosian, I. Pierce, C. Pridmore, N. Roth, D. Sandwell, K. Scharer, G. Seitz, D. Singleton, B. Smith-Konter, E. Spangler, B. Swanson, J.T. Jobe, J. Treiman, F. Turner, A. Williams, X. Xu, J. Zachariasen, J. Zimmerman, R. Zinke, 2020, Documentation of surface fault rupture and ground deformation features produced by the Ridgecrest M6.4 and M7.1 earthquake sequence of July 4 and 5, 2019, Seismological Research Letters.

[34] Heflin, M., **A. Donnellan**, J. Parker, G. Lyzenga, A. Moore, L. Grant Ludwig, J. Rundle, J. Wang, M. Pierce, 2020, Automated Estimation and Tools to Extract Positions, Velocities,

Breaks, and Seasonal Terms from Daily GNSS Measurements: Illuminating Nonlinear Salton Trough Deformation, Earth and Space Science, doi: 10.1029/2019EA000644.

[35] Rundle, J.B., Luginbuhl, M., Khapikova, P., Turcotte, D.L., **Donnellan, A**. and McKim, G., 2020. Nowcasting great global earthquake and tsunami sources. Pure and Applied Geophysics, 177(1), pp.359-368.

[36] **Donnellan, A.**, Y. Lou, C. Padgett, A. Tanner, B. Hawkins, J. Parker, A. Ansar, M. Heflin, J. Green, R. Muellerschoen, 2019. Improving UAVSAR Results with GPS, Radiometry, and QUAKES Topographic Imager, IEEE Aerospace Conference, Big Sky, Montana, 2019.

[37] Rundle, J.B., Giguere, A., Turcotte, D.L., Crutchfield, J.P. and **Donnellan, A.**, 2019. Global Seismic Nowcasting with Shannon Information Entropy. Earth and Space Science, https://doi.org/10.1029/2018EA000464.

[38] **Donnellan, A**., Green, J., Ansar, A., Muellerschoen, R., Parker, J., Tanner, A., Lou, Y., Heflin, M., Arrowsmith, R., Rundle, J., Ben-Zion, Y., DeLong, S., Grant Ludwig, L., 2018, July. Geodetic Imaging of Fault Systems from Airborne Platforms: UAVSAR and Structure from Motion. In IGARSS 2018-2018 IEEE International Geoscience and Remote Sensing Symposium (pp. 7878-7881). IEEE.

[39] **Donnellan, A.**, J.W. Parker, M.B. Heflin, G.A. Lyzenga, L. Grant Ludwig, J.B. Rundle, J. Wang, M. Pierce, 2018, Fracture Advancing Step Tectonics Observed in the Yuha Desert and Ocotillo Following the 2010 M7.2 El Mayor – Cucapah Earthquake, Earth and Space Science.

[40] **Donnellan, A.**, J. Parker, C. Milliner, T.G. Farr, M. Glasscoe, Y. Lou, B. Hawkins, 2018, UAVSAR and Optical Analysis of the Thomas Fire Scar and Montecito Debris Flows: Case Study of Methods for Disaster Response using Remote Sensing Products, Earth and Space Science.

[41] **Donnellan, A.,** J. Green, A. Ansar, R. Muellershoen, J. Parker, A. Tanner, M. Heflin, R. Arrowsmith, J. Rundle, Y. Ben-Zion, S. DeLong, L. Grant Ludwig, 2018. Geodetic Imaging of Fault Systems from Airborne Platforms: UAVSAR and Structure from Motion. In Geoscience and Remote Sensing Symposium (IGARSS), 2018 IEEE International (in press), IEEE.

[42] **Donnellan, A.**, J. Green, J. Aletky, M. Glasscoe, R. Arrowsmith, Y. Ben-Zion, S. DeLong, 2017, Imaging of Earthquake Faults using Small UAVs as a Pathfinder for Air and Space Observations, IEEE Aerospace Conference, Big Sky, Montana, 2017.

[43] **Donnellan, A.**, R. Arrowsmith, S. DeLong, 2017. Spatio-Temporal Mapping of Plate Boundary Faults in California using Geodetic Imaging, Special Issue "Advances in Lithological and Structural Mapping Using Earth Observation Data," K. Tansey and S. Grebby eds., Geosciences, 7, 15, doi:10.3390/geosciences7010015.

[44] Rundle, J. B., D. L. Turcotte, **A. Donnellan**, L. Grant Ludwig, M. Luginbuhl, and G. Gong, 2016, Nowcasting earthquakes, Earth and Space Science, 3, doi:10.1002/2016EA000185.

[45] Parker, J., M. Glasscoe, **A. Donnellan**, T. Stough, M. Pierce, J. Wang, 2016, Radar Determination of Fault Slip and Location in Partially Decorrelated Images, Pure and Applied Geophysics, 174: 2295, doi:10.1007/s00024-016-1403-z.

[46] DeLong, S.B., **A. Donnellan**, D.J. Ponti, R.S. Rubin, G. Seitz, D.P. Schwartz, C.S. Prentice, T.E. Dawson, J.J. Lienkaemper, K.W. Hudnut, C. Rosa, A. Pickering, J.W. Parker, 2016, Tearing the terroir: Details and implications of surface rupture and deformation from the 24 August 2014 M6.0 South Napa earthquake, California, Earth and Space Science, 3, 416–430, doi:10.1002/2016EA000176.

[47] **Donnellan, A.**, R. Arrowsmith, V. Langenheim, 2016, Select Airborne Techniques for Mapping and Problem Solving, in Applied Geology in California (book), eds. R. Anderson and H. Ferriz, Star Publishing, California, pp 541-566.

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