

## Peer-Reviewed and Other Publications based on OpenTopography Facility Support

*Updated: July 26, 2015*

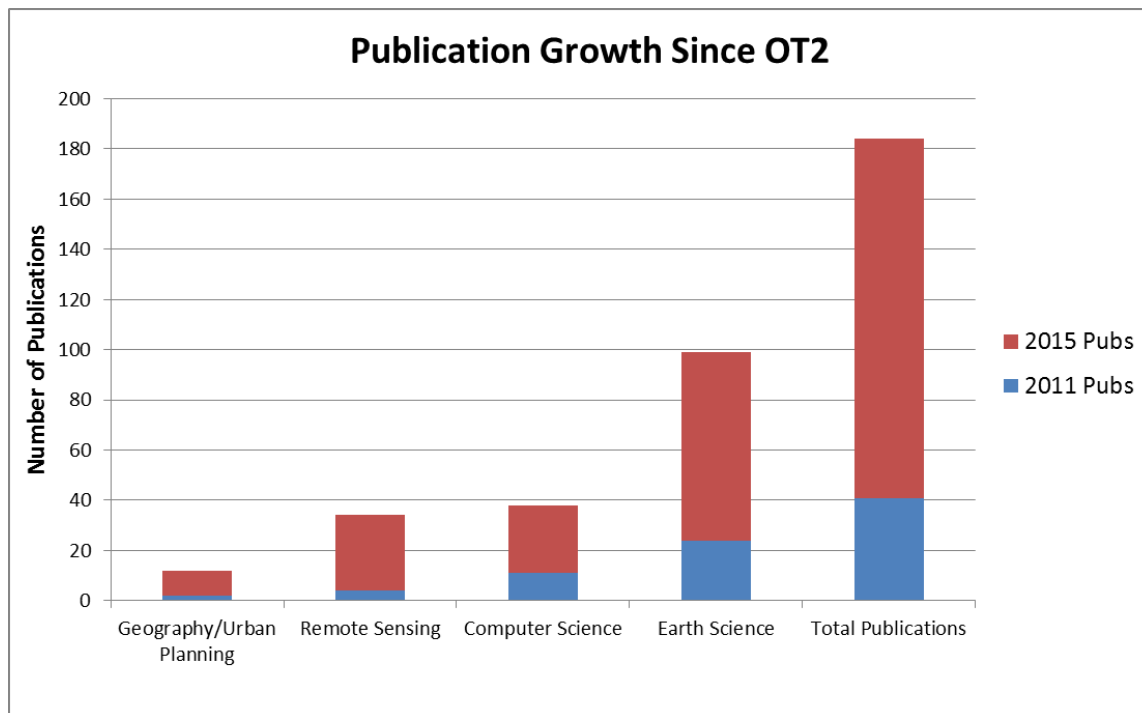
This is a bibliography of peer-reviewed publications and other published documents (reports, theses, etc.) enabled by data access, online data processing, and education and training materials available through the National Science Foundation supported OpenTopography Facility (including the GEON Lidar Workflow, the predecessor to OpenTopography) since about 2006.

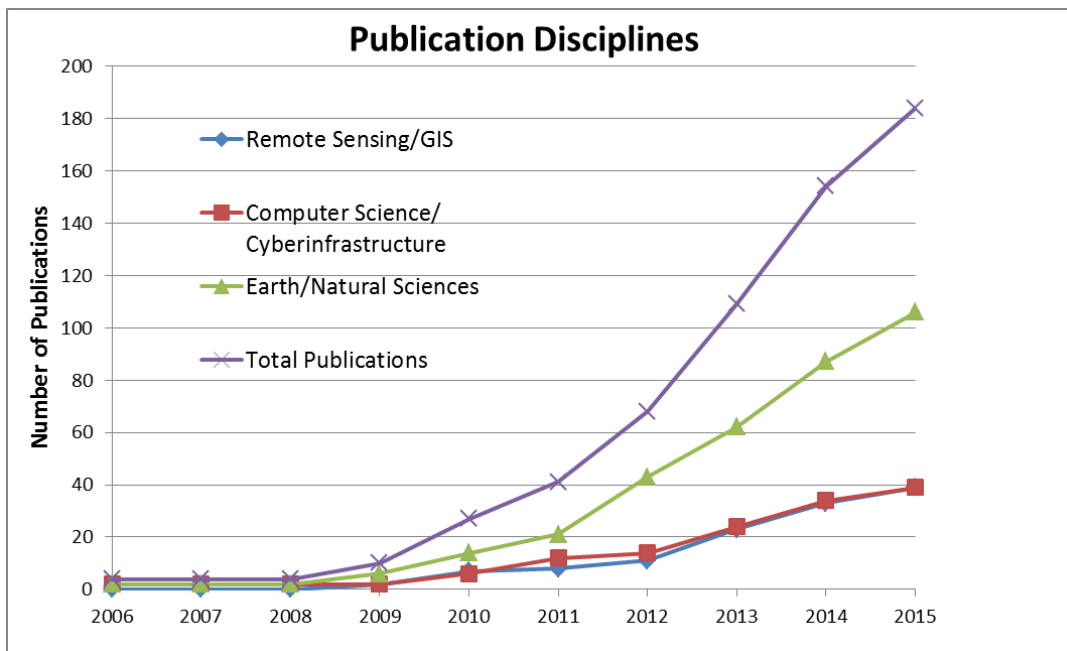
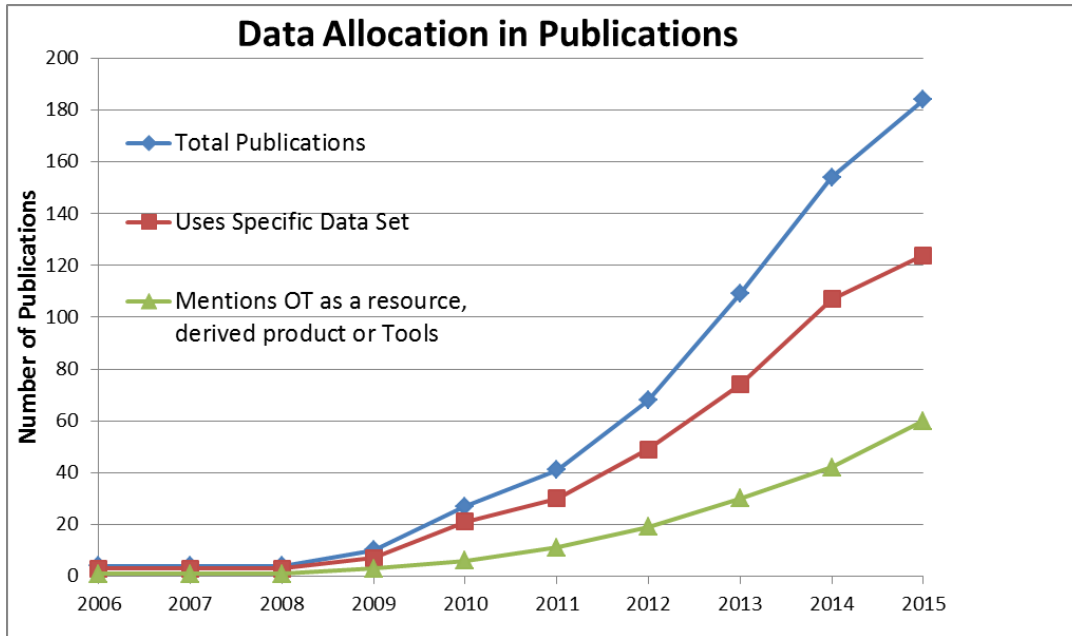
The impact of OpenTopography spans numerous disciplines spanning the earth and natural sciences, remote sensing, computer science, and geographic information science. OpenTopography has also enabled technical reports and other publications from government agencies and commercial-sector organizations.

The bibliography compiled below is based on Web of Science and Google Scholar searches as well as reports from members of the OpenTopography community. Citations are in GSA format with accompanying [DOIs](#) and an italicized description of what subject, application and/or dataset was used in the publication.

**Total Peer-Reviewed Publications:** 140

**Total Other Publications:** 45





## Peer Reviewed Publications

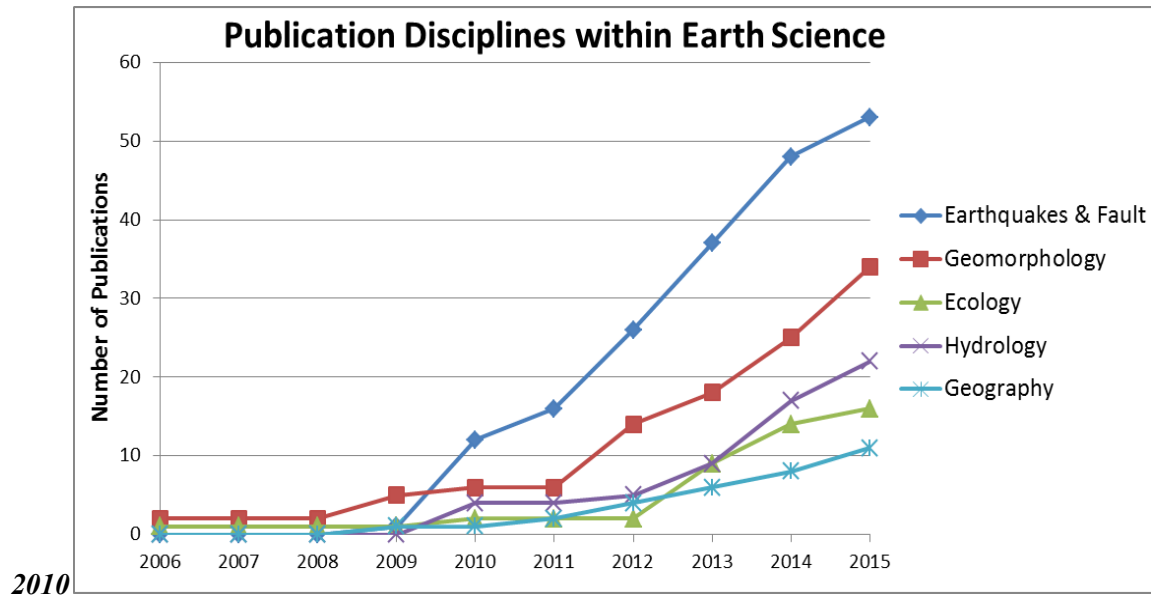
### 2006

1. Dietrich, W. E. and Perron, T., 2006. The search for a topographic signature of life: Nature, v. 439, p. 411-419, doi:10.1038/nature04452.  
*Earth Science (South Fork Eel River, CA Watershed Morphology)*

2. Jaeger-Frank, E., Crosby, C.J., Memon, A., Nandigam, V., Arrowsmith, J R., Conner, J., Altintas, I., and Baru, C., 2009, A Three Tier Architecture for LiDAR Interpolation and Analysis: Lecture Notes in Computer Science, v. 3993, p. 920-927, doi:10.1007/11758532\_123.  
*Computer Science*
3. Staley, D. M., Wasklewicz, T. A., Blaszczynski J. S., 2006, Surficial patterns of debris flow deposition on alluvial fans in death valley, CA, using airborne laser swath mapping data: *Geomorphology*, v. 74(1-4), p. 152-63, doi:10.1016/j.geomorph.2005.07.014.  
*Earth Science (Death Valley National Park: Badwater Basin)*

## 2009

1. Arrowsmith, J. R., and Zielke, O., 2009, Tectonic geomorphology of the San Andreas fault zone from high resolution topography: An example from the Cholame segment: *Geomorphology*, v. 113, no. 1-2, p. 70-81, doi:10.1016/j.geomorph.2009.01.002.  
*Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)*
2. Dong, P.L., 2009, Characterization of individual tree crowns using three-dimensional shape signatures derived from LiDAR data: *International Journal of Remote Sensing*, v. 3(24), p. 6621-6628, doi:10.1080/01431160903140761.  
*Computer Science (EarthScope Northern California LiDAR Project)*
3. Prentice, C. S., Crosby, C. J., Whitehill, C. S., Arrowsmith, J. R., Furlong, K. P., and Phillips, D. A., 2009, Illuminating northern California's active faults: *EOS*, v. 90(7), p. 55-56, doi:10.1029/2009EO070002.  
*Earth Science (EarthScope Northern California LiDAR Project)*
4. Smith, M. J., and Pain, C. F., 2009, Applications of remote sensing in geomorphology: Progress in *Physical Geography*, v. 33(4), p. 568-582, doi:10.1177/0309133309346648.  
*Geography*



2010

1. Akciz, S. O., Ludwig, L. G., Arrowsmith, J. R., and Zielke, O., 2010, Century-long average time intervals between earthquake ruptures of the San Andreas fault in the Carrizo Plain, California: *Geology*, v. 38(9), p. 787-790, doi:10.1130/G30995.1.  
*Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)*
2. DeLong, S.B., Hilley, G.E., Rymer, M.J., and Prentice, C., 2010, Fault zone structure from topography: Signatures of en echelon fault slip at Mistang Ridge on the San Andreas Fault, Monterey County, California: *Tectonics*, v. 29, doi:10.1029/2010TC002673.  
*Earth Science (EarthScope Northern California LiDAR Project)*
3. Dong, P. L., 2010, Sensitivity of LiDAR-derived three-dimensional shape signatures for individual tree crowns: a simulation study: *Remote Sensing Letters*, v. 1(3), p. 159-167, doi:10.1080/01431161003631550.  
*Computer Science (EarthScope Northern California LiDAR Project)*
4. Hilley, G. E., DeLong, S., Prentice, C., Blisniuk, K., & Arrowsmith, J. R., 2010, Morphologic dating of fault scarps using airborne laser swath mapping (ALSM) data: *Geophysical Research Letters*, v. 37(4), doi:10.1029/2009GL042044.  
*Remote Sensing (B4)*
5. Jaworowski, C., Healsler, H. P., Neale, C. M. U., and Sivarajan, S., 2010, Using thermal infrared imagery and LiDAR in Yellowstone geyser basins: *Yellowstone Science*, v. 18(1), p. 8-19.  
*Earth Science (EarthScope Intermountain Seismic Belt Lidar Project)*
6. Krishnan, S., Baru, C., Crosby, C.J., 2010, Evaluation of MapReduce for Gridding LIDAR Data: *in Proceedings, IEEE International Conference on Cloud Computing Technology and Science*, 2<sup>nd</sup>, p. 33-40, doi:10.1109/CloudCom.2010.34.  
*Computer Science*

7. Nandigam, V., Baru, C., and Crosby, C., 2010, Database design for high-resolution LIDAR topography data, *in* Proceedings, Gertz, M., and Ludascher, B., eds., Scientific and statistical database management, 22nd International Conference, Heidelberg, Germany, p. 151-159, doi:10.1007/978-3-642-13818-8\_12.  
*Computer Science*
8. Zielke, O., Arrowsmith, J. R., Ludwig, L. G., and Akciz, S. O., 2010, Slip in the 1857 and earlier large earthquakes along the Carrizo Plain, San Andreas Fault: *Science*, v. 187(1), p. 385-393, doi:10.1126/science.1182781.  
*Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)*

## 2011

1. Crosby, C.J., Arrowsmith, J R., Nandigam, V., Baru, C., 2011, A geoinformatics approach to online access and processing of LIDAR topography data: *in* Geoinformatics, R. Keller and C. Baru, eds., Cambridge University Press, London.  
*Computer Science*
2. Bernardin, T., Cowgill, E., Kreylos, O., Bowles, C., Gold, P., Hamann, B., and Kellogg, L., 2011, Crusta: A new virtual globe for real-time visualization of sub-meter digital topography at planetary scales: *Computers & Geosciences*, v. 37(1), p. 75-85, doi:10.1016/j.cageo.2010.02.006.  
*Computer Science (EarthScope Northern, Southern & Eastern CA Lidar Project)*
3. Elberink, S. O., Shoko, M., Fathi, S. A., and Rutzinger, M., 2011, Detection of collapsed buildings by classifying segmented airborne laser scanner data: *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, v. 108(5), p. 307-312.  
*Remote Sensing (World Bank- ImageCat Inc.- RIT Haiti Earthquake Lidar Dataset)*
4. Hengl, T., and Reuter, H., 2011, How accurate and usable is GDEM? A statistical assessment of GDEM using LiDAR data: *Geomorphometry*, v. 2, p. 45-48.  
*Geography*
5. Krishnan, S., Crosby, C.J., Nandigam, V., Phan, P., Cowart, C., Baru, C., and Arrowsmith, J R., 2011, OpenTopography: a services oriented architecture for community access to LIDAR topography: *In* Proceedings, International Conference on Computing for Geospatial Research & Applications, 2nd (COM.Geo '11), AMC, doi:10.1145/1999320.1999327.  
*Computer Science*
6. Toké, N. A., Arrowsmith, J. R., Rymer, M. J., Landgraf, A., Haddad, D. E., Busch, M., Cohan, J. and Hannah, A., 2011, Late Holocene slip rate of the San Andreas fault and its accommodation by creep and moderate-magnitude earthquakes at Parkfield, California: *Geology*, v. 39(3), p. 243-246, doi:10.1130/G31498.1.  
*Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)*

## 2012

1. Anderson, S.P., Anderson, R.S., Tucker, G.E., 2012, Landscape scale linkages in critical zone evolution: *Comptes Rendus Geoscience*, v. 344(11), p. 586-596, doi:10.1016/j.crte.2012.10.008.  
*Earth Sciences (Boulder Creek CZO August 2010 Snow-Off Lidar Survey)*
2. Agarwal, D., Puri, S., He, X., and Prasad, S. K., 2012, May, A system for GIS polygonal overlay computation on linux cluster-an experience and performance report: *in* Parallel and Distributed Processing Symposium Workshops & PhD Forum (IPDPSW), 26th International, p. 1433-1439, doi:10.1109/IPDPSW.2012.180.  
*Computer Science*
3. Boggs, K. J., Dordevic, M. M., and Shipley, S. T., 2012, Google Earth® Models with COLLADA and WxAzygy® Transparent Interface: An example from Grotto Creek, Front Ranges, Canadian Cordillera: *Geoscience Canada*, v. 39(2), p. 56-67.  
*Computer Science*
4. Borsa, A., and Minster, J. B., 2012, Rapid Determination of Near-Fault Earthquake Deformation Using Differential LiDAR: *Bulletin of the Seismological Society of America*, v. 102(4), p. 1335-1347, doi:10.1785/0120110159.  
*Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)*
5. Carley, J.K., Pasternack, G.P., Wyrick, J.R., Barker, J.R., Bratovich, P.M., Massa, D.A., Reedy, G.D., Johnson, T.R., 2012, Significant decadal channel change 58–67 years post-dam accounting for uncertainty in topographic change detection between contour maps and point cloud models: *Geomorphology*, v. 179, p. 71-88, doi:10.1016/j.geomorph.2012.08.001.  
*Earth Science/Computer Science*
6. Cowgill, E., Bernardin, T. S., Oskin, M. E., Bowles, C., Yikilmaz, M. B., Kreylos, O., Elliott, A.J., Bishop, S., Gold, R.D., Morelan, A., Bawden, G.W., Hamann, B., and Kellogg, L. H., 2012, Interactive terrain visualization enables virtual field work during rapid scientific response to the 2010 Haiti earthquake: *Geosphere*, 8(4), p. 787-804, doi:10.1130/GES00687.1.  
*Earth Sciences (World Bank- ImageCat Inc.- RIT Haiti Earthquake Lidar Dataset)*
7. Crosby, C.J., 2012, Lidar and Google Earth: Simplifying Access to High-Resolution Topography Data: *in*, *Google Earth and Virtual Visualizations in Geoscience Education and Research*, edited by S.J. Whitmeyer, D.G. De Paor, J. Bailey, and T. Ornduff, Geological Society of America Special Paper 492, p.37-48, doi:10.1130/2012.2492(03).  
*Earth Science/Education (Lake Tahoe Basin LiDAR)*
8. DeLong, S. B., Prentice, C. S., Hilley, G. E., and Ebert, Y., 2012, Multitemporal ALSM change detection, sediment delivery, and process mapping at an active earthflow: *Earth Surface Processes and Landforms*, v.37(3), p. 262-272, doi:10.1002/esp.2234.  
*Earth Science (Northern San Andreas Fault, & EarthScope Northern CA LiDAR Project)*
9. DiBiase, R.A., Heimsath, A.M., and Whipple, K.X., 2012. Hillslope response to tectonic forcing in threshold landscapes, *Earth Surface Processes and Landforms* 37, 855-865, doi:10.1002/esp.3205.  
*Earth Science (San Gabriel, CA, Mount Baden Powell)*

10. Ganev, P. N., Dolan, J. F., McGill, S. F., and Frankel, K. L., 2012, Constancy of geologic slip rate along the central Garlock fault: implications for strain accumulation and release in southern California: *Geophysical Journal International*, v. 190(2), p. 745-760, doi:10.1111/j.1365-246X.2012.05494.x.  
*Earth Science (EarthScope Northern California LiDAR Project & EarthScope Southern and Eastern California Lidar Project)*
11. Haddad, D. E., Akçiz, S. O., Arrowsmith, J. R., Rhodes, D. D., Oldow, J. S., Zielke, O., Toke, N.A., Haddad, A.G., Mauer, J., and Shilpakar, P., 2012, Applications of airborne and terrestrial laser scanning to paleoseismology.: *Geosphere*, v. 8(4), p. 771-786, doi:10.1130/GES00701.1.  
*Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)*
12. Haddad, D. E., Zielke, O., Arrowsmith, J. R., Purvance, M. D., Haddad, A. G., and Landgraf, A., 2012, Estimating two-dimensional static stabilities and geomorphic settings of precariously balanced rocks from unconstrained digital photographs: *Geosphere*, v. 8(5), p. 1042-1053, doi:10.1130/GES00788.1.  
*Earth Science (Granite Dells, AZ)*
13. Hurwitz, S., Harris, R. N., Werner, C. A., and Murphy, F., 2012, Heat flow in vapor dominated areas of the Yellowstone Plateau Volcanic Field: Implications for the thermal budget of the Yellowstone Caldera: *Journal of Geophysical Research: Solid Earth (1978–2012)*, v. 117(B10), doi:10.1029/2012JB009463.  
*Earth Sciences (EarthScope Intermountain Seismic Belt Lidar Project)*
14. James, L. A., Walsh, S. J., and Bishop, M. P., 2012, Geospatial technologies and geomorphological mapping: *Geomorphology*, v. 137, p. 1-4, doi:10.1016/j.geomorph.2011.06.002.  
*Geography*
15. Lewis, P., Mc Elhinney, C. P., & McCarthy, T., 2012, LiDAR data management pipeline; from spatial database population to web-application visualization: *in Proceedings of the International Conference on Computing for Geospatial Research and Applications*, 3<sup>rd</sup>, p. 16, ACM, doi:10.1145/2345316.2345336.  
*Geography*
16. McCoy, S. W., Kean, J. W., Coe, J. A., Tucker, G. E., Staley, D. M., and Wasklewicz, T. A., 2012, Sediment entrainment by debris flows: In situ measurements from the headwaters of a steep catchment: *Journal of Geophysical Research: Earth Surface (2003–2012)*, v.117.  
*Earth Science (Chalk Basin, CO)*
17. Mitasova, H., Harmon, R. S., Weaver, K. J., Lyons, N. J., and Overton, J. F., 2012, Scientific visualization of landscapes and landforms: *Geomorphology*, v. 137(1), p. 122-137, doi:10.1016/j.geomorph.2010.09.033.  
*Earth Sciences*

18. Nissen, E., Krishnan, A. K., Arrowsmith, J. R., and Saripalli, S., 2012, Three-dimensional surface displacements and rotations from differencing pre-and post-earthquake LiDAR point clouds: *Geophysical Research Letters*, v. 39(16), doi:10.1029/2012GL052460.  
*Earth Science/Remote Sensing (B4 Project- Southern San Andreas and San Jacinto Faults)*
19. Oskin, M. E., Arrowsmith, J. R., Corona, A. H., Elliott, A. J., Fletcher, J. M., Fielding, E. J., and Teran, O. J. (2012). Near-field deformation from the El Mayor–Cucapah earthquake revealed by differential LIDAR: *Science*, v. 335(6069), p. 702-705, doi:10.1126/science.1213778.  
*Earth Science (El Mayor-Cucapah)*
20. Salisbury, J. B., Rockwell, T. K., Middleton, T. J., & Hudnut, K. W., 2012, LiDAR and field observations of slip distribution for the most recent surface ruptures along the central San Jacinto Fault: *Bulletin of the Seismological Society of America*, v. 102(2), p. 598-619, doi:10.1785/0120110068.  
*Earth Science*
21. Schwartz, D. P., Haeussler, P. J., Seitz, G. G., and Dawson, T. E., 2012, Why the 2002 Denali fault rupture propagated onto the Totschunda fault: Implications for fault branching and seismic hazards: *Journal of Geophysical Research: Solid Earth*, v. 117(B11), doi:10.1029/2011JB008918.  
*Earth Science (Alaska Denali Rupture GeoEarthScope)*
22. Strande, S. M., Cicotti, P., Sinkovits, R. S., Young, W. S., Wagner, R., Tatineni, M., Hocks, E., Snavely, A., and Norman, M., 2012, Gordon: design, performance, and experiences deploying and supporting a data intensive supercomputer: *in Proceedings, Conference of the Extreme Science and Engineering Discovery Environment: Bridging from the extreme to the campus and beyond*, 1<sup>st</sup>, p. 3. ACM, doi:10.1145/2335755.2335789.  
*Computer Science*
23. Zielke, O., and Arrowsmith, J. R., 2012, LaDiCaoz and LiDARimager-MATLAB GUIs for LiDAR data handling and lateral displacement measurement: *Geosphere*, v. 8(1), p. 206-221, doi:10.1130/GES00686.1.  
*Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)*
24. Zielke, O., Arrowsmith, J. R., Ludwig, L. G., and Akciz, S. O., 2012, High-Resolution Topography-Derived Offsets along the 1857 Fort Tejon Earthquake Rupture Trace, San Andreas Fault: *Bulletin of the Seismological Society of America*, v. 102, p. 1135-1154, doi:10.1785/0120110230.  
*Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)*

## 2013

1. Brooks, B. A., Glennie, C., Hudnut, K. W., Ericksen, T., and Hauser, D., 2013, Mobile Laser Scanning Applied to the Earth Sciences: *Eos, Transactions American Geophysical Union*, v. 94(36), p. 313-315, doi:10.1002/2013EO360002.  
*Remote Sensing (OT as means for testing mobile lidar units)*



2. Bunting, P., Armston, J., Clewley, D., Lucas, and R.M., 2013, Sorted pulse data (SPD) library—Part II: A processing framework for LiDAR data from pulsed laser systems in terrestrial environments: *Computers & Geosciences*, v. 56, p. 207-215, doi:10.1016/j.cageo.2013.01.010.  
*Remote Sensing (OT as an effort to make lidar data and processing more accessible.)*
3. Cashman, K. V., Soule, S. A., Mackey, B. H., Deligne, N. I., Deardorff, N. D., and Dietterich, H. R., 2013, How lava flows: New insights from applications of lidar technologies to lava flow studies: *Geosphere*, v. 9, p. 1664-1680, doi:10.1130/GES00706.1.  
*Earth Science (North Sister, OR: Collier Cone Lava Flow)*
4. DiBiase, R.A., and Lamb, M.P., 2013, Vegetation and wildfire controls on sediment yield in bedrock landscapes: *Geophysical Research Letters*, v. 40, p. 1093-1097, doi:10.1002/grl.50277.  
*Earth Science*
5. Fisher, G.B., Bookhagen, B., Amos, and C.B., 2013, Channel planform geometry and slopes from freely available high-spatial resolution imagery and DEM fusion: Implications for channel width scaling, erosion proxies, and fluvial signatures in tectonically active landscapes: *Geomorphology*, v. 194, p. 46-56, doi:10.1016/j.geomorph.2013.04.011.  
*Earth Science (Dragon's Back Ridge, and EarthScope Yakima LiDAR Project, Yakima)*
6. Glennie, C. L., Carter, W. E., Shrestha, R. L., and Dietrich, W. E., 2013, Geodetic imaging with airborne LiDAR: the Earth's surface revealed: *Reports on Progress in Physics*, v. 76, doi:10.1088/0034-4885/76/8/086801.  
*Remote Sensing*
7. Gold, P.O., Oskin, M.E., Elliott, A.J., Hinojosa-Corona, A., Taylor, M.H., Kreylos, O., and Cowgill, E., 2013, Coseismic slip variation assessed from terrestrial lidar scans of the El Mayor–Cucapah surface rupture: *Earth and Planetary Science Letters*, v. 366, p. 151-162, doi:10.1016/j.epsl.2013.01.040.  
*Earth Sciences (El Mayor-Cucapah Earthquake (4 April 2010) Rupture LiDAR Scan, TLS data)*
8. Green, G. M., Ahearn, S. C., and Ni-Meister, W., 2013, A multi-scale approach to mapping canopy height: *Photogrammetric Engineering & Remote Sensing*, v. 79(2), p. 185-194.  
*Remote Sensing*
9. Gui, Z., Yang, C., Xia, J., Li, J., Rezgui, A., Sun, M., Xu, Y., and Fay, D., 2013, A visualization-enhanced graphical user interface for geospatial resource discovery: *Annals of GIS*, v. 19, p. 109-121, doi:10.1080/19475683.2013.782467.  
*Computer Science*
10. Gui, Z., Yang, C., Xia, J., Liu, K., Xu, C., Li, J., and Lostritto, P., 2013, A performance, semantic and service quality-enhanced distributed search engine for improving geospatial resource discovery: *International Journal of Geographical Information Science*, v. 27(6), p. 1109-1132, doi:10.1080/13658816.2012.739692.  
*Computer Science*

11. Isenburg, M., 2013, LASzip: Photogrammetric Engineering & Remote Sensing, v. 79, p. 209-217, doi:10.14358/PERS.79.2.209.  
*Computer Science (OpenTopo mentioned as a group using .laz files for point clouds)*
12. Jaworowski, C., Heasler, H., Neale, C., Saravanan, S., and Masih, A., 2013, Temporal and Seasonal Variations of the Hot Spring Basin Hydrothermal System, Yellowstone National Park, USA: Remote Sensing, v. 5, p. 6587-6610, doi:10.3390/rs5126587.  
*Earth Science (EarthScope Intermountain Seismic Belt Lidar Project)*
13. Jayendra-Lakshman, M., and Devarajan, V., 2013, A New Feature Descriptor for LIDAR Image Matching: ISPRS Annals of Photogrammetry, Remote Sensing and Spatial Information Sciences, v. 1(1), p. 157-162.  
*Remote Sensing (Yosemite National Park: Poopenaut Valley and Wawona)*
14. Mankoff, K. D., and Russo, T. A., 2013, The Kinect: A low-cost, high-resolution, short-range 3D camera: Earth Surface Processes and Landforms, v. 38(9), p.926-936, doi:10.1002/esp.3332.  
*Computer Science*
15. Marliyani, G. I., Rockwell, T. K., Onderdonk, N. W., and McGill, S. F., 2013, Straightening of the Northern San Jacinto Fault, California, as Seen in the Fault-Structure Evolution of the San Jacinto Valley Stepover: Bulletin of the Seismological Society of America, v.103(3), p. 2047-2061, doi:10.1785/0120120232.  
*Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)*
16. Meigs, A., 2013, Active tectonics and the LiDAR revolution: Lithosphere, v. 5(2), p. 226-229, doi:10.1130/RF.L004.1.  
*Earth Science/Remote Sensing*
17. Olsen, M. J., Chen, Z., Hutchinson, T., and Kuester, F., 2013, Optical techniques for multiscale damage assessment: Geomatics: Natural Hazards and Risk, vol. 4(1), p. 49-70, doi:10.1080/19475705.2012.670668.  
*Remote Sensing*
18. Orloff, T., Kreslavsky, M., and Asphaug, E., 2013, Distribution of polygon characteristic scale in Martian patterned ground terrain in the northern hemisphere using the Fourier transform: Journal of Geophysical Research: Planets, v. 118(7), p.1558-1566, doi:10.1002/jgre.20111.  
*Remote Sensing*
19. Padmanabhan, A., Youn, C., Hwang, M., Liu, Y., Wang, S., Wilkins-Diehr, N., and Crosby, C., 2013, Integration of science gateways: a case study with CyberGIS and OpenTopography: in Proceedings, Conference on Extreme Science and Engineering Discovery Environment: Gateway to Discovery (XSEDE '13), ACM, New York, NY, USA, Article 28 , doi:10.1145/2484762.2484808.  
*Computer science*

20. Pelletier, J. D., 2013, Deviations from self-similarity in barchan form and flux: The case of the Salton Sea dunes, California: *Journal of Geophysical Research: Earth Surface*, v. 118(4), p. 2406-2420, doi:10.1002/2013JF002867.  
*Earth Science (2010 Salton Sea Lidar Collection)*
21. Schleingross, J.S., Minchew, B. M., Mackey, B.H., Simons, M., Lamb, M.P., and Hensley, S., 2013, Fault-zone controls on the spatial distribution of slow-moving landslides: *GSA Bulletin*, v. 125, p. 473-489, doi:10.1130/B30719.1.  
*Earth Science (EarthScope Northern California LiDAR Project)*
22. Schrijvers, O., van Bommel, F., and Buchin, K., 2013, Delaunay triangulations on the word RAM: Towards a practical worst-case optimal algorithm: *in Proceedings, Voronoi Diagrams in Science and Engineering (ISVD), 10<sup>th</sup> International Symposium*, p. 7-15, doi:10.1109/ISVD.2013.10.  
*Computer Science Yosemite (National Park, CA: Rockfall Studies)*
23. Sexton, J. O., Song, X. P., Feng, M., Noojipady, P., Anand, A., Huang, C., and Townshend, J. R., 2013, Global, 30-m resolution continuous fields of tree cover: Landsat-based rescaling of MODIS vegetation continuous fields with lidar-based estimates of error: *International Journal of Digital Earth*, v. 6(5), p. 427-448, doi:10.1080/17538947.2013.786146.  
*Remote Sensing (Utah and CA)*
24. Smeeckaert, J., Mallet, C., David, N., Chehata, N., and Ferraz, A., 2013, Large-scale classification of water areas using airborne topographic lidar data: *Remote Sensing of Environment*, v. 138, p. 134-148, doi:10.1016/j.rse.2013.07.004.  
*Remote Sensing*
25. Tabares-Rodenas, P., Ormö, J., King Jr., and D.T., 2013, Cosmic wabi-sabi: Tell-tale morphological imperfections in impact crater shapes revealed by numerical analysis: *Earth and Planetary Science Letters*, v. 377-378, p. 211-217, doi:10.1016/j.epsl.2013.06.043.  
*Earth Science (Meteor Crater, AZ)*
26. Tang, S., Dong, P., and Buckles, B. P., 2013, Three-dimensional surface reconstruction of tree canopy from lidar point clouds using a region-based level set method: *International Journal of Remote Sensing*, v. 34(4), p. 1373-1385, doi:10.1080/01431161.2012.720046.  
*Remote Sensing (Northern San Andreas Fault, CA and EarthScope Northern California LiDAR Project)*
27. Vaccari, A., and Acton, S. T., 2013, Spatiotemporal Gaussian feature detection in sparsely sampled data with application to InSAR: *In SPIE Defense, Security, and Sensing*, doi:10.1117/12.2020669.  
*Remote Sensing*
28. Vogeler, J. C., Hudak, A. T., Vierling, L. A., and Vierling, K. T., 2013, Lidar-derived canopy architecture predicts Brown Creeper occupancy of two western coniferous forests: *The Condor*, v. 115(3), p. 614-622, doi:10.1525/cond.2013.110082.  
*Earth Sciences (Idaho Lidar Consortium)*

29. Wang, S., Anselin, L., Bhaduri, B., Crosby, C., Goodchild, M.F., Liu, Y., and Nyerges, T.L., 2013, CyberGIS software: a synthetic review and integration roadmap: *International Journal of Geographical Information Science*, v. 27(11), p. 2122-2145, doi:10.1080/13658816.2013.776049.  
*Geography/Computer Science*
30. Welte, J., et al., 2013, Autogenic mobile computing technologies in agriculture: Applications and sensor networking for smart phones and tablets: *in Proceedings, Sustainable Agriculture through ICT Innovations, EFITA2013*.  
*Computer Science/Earth Science*
31. Wrucke, C. T., Wrucke, R. T., and Sayre, T., 2013, Reassessment of the 1906 San Andreas Fault rupture in Portola Valley, California, from synthesis of lidar and historical data: *Bulletin of the Seismological Society of America*, v. 103(4), p. 2404-2423, doi: 10.1785/0120120201.  
*Earth Science (Northern San Andreas Fault, CA and EarthScope Northern California LiDAR Project)*

## 2014

1. Ames, Daniel P., Quinn, Nigel and Rizzoli, A. E., 2014, Assessing the relative value of stereoscopic 3D versus head tracking in large scale immersive visualization: *in Proceedings, International Congress on Environmental Modeling and Software, 7<sup>th</sup>*, San Diego, California, doi:10.13140/2.1.2596.6720.  
*Computer Science/Earth Science (EarthScope Intermountain Seismic Belt Lidar Project: San Diego, 2005)*
2. Anderson, Scott, and John Pitlick. 2014, Using repeat lidar to estimate sediment transport in a steep stream: *Journal of Geophysical Research: Earth Surface*, v. 119(3), p. 621-643, doi: 10.1002/2013JF002933.  
*Earth Science (SW flank of Mt. Rainier, uses seed grant data, but not seed grant PI)*
3. Badawy, H. M., Moussa, A., and El-Sheimy, N., 2014, Automatic classification of coarse density lidar data in urban areas: *ISPRS-International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences 1*, p. 77-81, doi:10.5194/isprsarchives-XL-5-77-2014.  
*Remote Sensing (San Diego 2005)*
4. Basgall, Paul L., Kruse, F. A., and Olsen, R. C., 2014, Comparison of LiDAR and stereo photogrammetric point clouds for change detection: *in, Proceedings Laser Radar Technology and Applications XIX; and Atmospheric Propagation XI*, doi:10.1117/12.2049856.  
*Remote Sensing (San Diego, 2005: OT lidar to compare to point clouds created from aerial photos/photogrammetry)*
5. Bellakaout, A., Cherkaoui Omari, M., Ettarid, M., and Touzani, A., 2014, Automatic extraction of 3D objects from LiDAR data: *Journal of Architectural Engineering Technology*, v. 3(123), doi:10.4172/2168-9717.1000123.  
*Computer Science (Presents algorithm to automatically extract 3D features from lidar)*

6. Bilderback, E. L., Pettinga, J. R., Litchfield, N. J., Quigley, M., Marden, M., Roering, J. J., and Palmer, A. S., 2014, Hillslope response to climate-modulated river incision in the Waipaoa catchment, East Coast North Island, New Zealand: Geological Society of America Bulletin, B31015-1, doi:10.1130/B31015.1.  
*Computer Science (Gridding using tools from OT)*
7. Bode, C.A., Limm, M.P., Power, M.E., and Finlay, J.C., 2014, Subcanopy Solar Radiation model: Predicting solar radiation across a heavily vegetated landscape using LiDAR and GIS solar radiation models: Remote Sensing of Environment, v. 154, doi:10.1016/j.rse.2013.01.028.  
*Geography (South Fork Eel River, CA Watershed Morphology,,South Fork Eel River, CA)*
8. Brubaker, K.M., Johnson, S. E., Brinks, J., and Leites, L.P., 2014, Estimating Canopy Height of Deciduous Forests at a Regional Scale with Leaf-Off, Low Point Density LiDAR: Canadian Journal of Remote Sensing, v. 40(2), p. 123-134, doi:10.1080/07038992.2014.943392.  
*Earth Science/Remote Sensing (Shale Hills CZO leaf off)*
9. Clubb, F. J., Mudd, S. M., Milodowski, D. T., Hurst, M. D., and Slater, L. J., 2014, Objective extraction of channel heads from high-resolution topographic data: Water Resources Research, v. 50(5), p. 4283-4304, doi:10.1002/2013WR015167.  
*Earth Science/Remote Sensing (Truckee CA, Sogehen Creek Snowpack (Seed grant))*
10. Dennison, P.E., Fryer, G.K., and Cova, T.J., 2014, Identification of firefighter safety zones using lidar: Environmental Modelling & Software, v. 59, p. 91-97, doi:10.1016/j.envsoft.2014.05.017.  
*Geography (Southern Sierra Nevada Critical Zone Observatory: Snow Off)*
11. Diekema, A.R., Wesolek, A., Walters, C.D., 2014, The NSF/NIH Effect: Surveying the effect of Data Management Requirements on Faculty, Sponsored Programs, and Institutional Repositories: The Journal of Academic Librarianship, vol. 40(4), p. 322-331, doi:10.1016/j.acalib.2014.04.010.  
*Computer Science*
12. Dietterich, Hannah R., and Katharine V. Cashman, 2014, Channel networks within lava flows: Formation, evolution, and implications for flow behavior: Journal of Geophysical Research: Earth Surface, v. 119(8), p. 1704-1724, doi:10.1002/2014JF003103.  
*Earth Science (Hawaii Big Island lidar survey)*
13. Eakins, Barry W., and Grothe, P. R., 2014, Challenges in building coastal digital elevation models: Journal of Coastal Research, v. 30(5), p. 942-953, doi:10.2112/JCOASTRES-D-13-00192.1.  
*Earth Science*
14. Fan, Y., Weisberg, P.J., Nowak, R.S., 2014, Spatio-temporal analysis of remotely-sensed forest mortality associated with road de-icing salts: Science of The Total Environment, v. 472, p. 929-938, doi:10.1016/j.scitotenv.2013.11.103.  
*Earth Science/Computer Science (Lake Tahoe Basin LiDAR)*
15. Fan, Y., , Liu, Y., Wang, S., Tarboton, D., Yildirim, A., and Wilkins-Diehr, N., 2014, Accelerating TauDEM as a scalable hydrological terrain analysis service on XSEDE:

in Proceedings, 2014 Annual Conference on Extreme Science and Engineering Discovery Environment, ACM, doi:10.1145/2616498.2616510.

*Computer Science*

16. Fletcher, J. M., Teran, O. J., Rockwell, T. K., Oskin, M. E., Hudnut, K. W., Mueller, K. J., and González-García, J., 2014, Assembly of a large earthquake from a complex fault system: Surface rupture kinematics of the 4 April 2010 El Mayor–Cucapah (Mexico) Mw 7.2 earthquake: *Geosphere*, v. 10(4), p. 797-827, doi:10.1130/GES00933.1.  
*Earth Science (El Mayor-Cucapah, Mexico)*
17. Glennie, C. L., Hinojosa-Corona, A., Nissen, E., Kusari, A., Oskin, M. E., Arrowsmith, J. R., and Borsa, A., 2014, Optimization of legacy lidar data sets for measuring near-field earthquake displacements: *Geophysical Research Letters*, v. 41(10), p. 3494-3501, doi:10.1002/2014GL059919.  
*Earth Science (EMC pre (private) and post event lidar).*
18. Gold, R. D., Briggs, R. W., Personius, S. F., Crone, A. J., Mahan, S. A., and Angster, S. J., 2014, Latest Quaternary paleoseismology and evidence of distributed dextral shear along the Mohawk Valley fault zone, northern Walker Lane, California: *Journal of Geophysical Research: Solid Earth*, v. 119(6), p. 5014-5032, doi:10.1002/2014JB010987.  
*Earth Science (Walker Lane USGS. Mentions that data are available on OpenTopo)*
19. Gorum, T., Korup, O., van Westen, C.J., van der Meijde, M., Xu, C., van der Meer, F.D., 2014, Why so few landslides triggered by the 2002 Denali earthquake, Alaska: *Quaternary Science Reviews*, v. 95, p. 80-94, doi:10.1016/j.quascirev.2014.04.032.  
*Earth Science (EarthScope Alaska Denali Totschunda LiDAR Project)*
20. Harpold, A. A., Guo, Q., Molotch, N., Brooks, P. D., Bales, R., Fernandez-Diaz, J. C., and Lucas, R., 2014, LiDAR-derived snowpack data sets from mixed conifer forests across the Western United States: *Water Resources Research*, v. 50(3), p. 2749-2755, doi:10.1002/2013WR013935.  
*Earth Science (CZOs Jemez Basin, Boulder Creek, Southern Sierra)*
21. Hu, H., Ding, Y., Zhu, Q., Wu, B., Lin, H., Du, Z., Zhang, Y., Zhang, Y., 2014, An adaptive surface filter for airborne laser scanning point clouds by means of regularization and bending energy: *ISPRS Journal of Photogrammetry and Remote Sensing*, v. 92, p. 98-111.  
*Remote Sensing*
22. Johnson, K., Nissen, E., Saripalli, S., Arrowsmith, J.R., McGarey, P., Scharer, K., Williams, P., and Blisniuk, K., 2014, Rapid mapping of ultrafine fault zone topography with structure from motion: *Geosphere*, v. 10(5), p. 1-18, doi:10.1130/GES01017.1.  
*Earth Science (B4 for comparison and SfM data)*
23. Le, Phong V., and Kumar, Praveen, 2014, Power law scaling of topographic depressions and their hydrologic connectivity: *Geophysical Research Letters*, v. 41(5), p. 1553-1559, doi:10.1002/2013GL059114.  
*Earth Science/Remote Sensing (Christiana River basin, Iowa river, NMSZ, Owyhee River, Mojave, CA)*

24. Liu, Y., Padmanabhan, A., and Wang, S., 2014, CyberGIS gateway for enabling data-rich geospatial research and education: *Concurrency and Computation: Practice and Experience*, v. 27(2), p. 395-407, doi:10.1002/cpe.3256.  
*Computer Science (DEM access and use of Opal2 SOAP, OGC WPS and OGC CSW)*
25. Marshall, Jill A., and Roering, J.J., 2014, Diagenetic variation in the Oregon Coast Range: Implications for rock strength, soil production, hillslope form, and landscape evolution: *Journal of Geophysical Research: Earth Surface*, v. 119(6), p. 1395-1417, doi:10.1002/2013JF003004.  
*Earth Science (DOGAMI)*
26. Moulin, A., Benedetti, L., Gosar, A., Rupnik, P.J., Rizza, M., Bourlès, D., and Ritz, J.F., 2014, Determining the present-day kinematics of the Idrija fault (Slovenia) from airborne LiDAR topography: *Tectonophysics*, v. 628, p. 188-205, doi:10.1016/j.tecto.2014.04.043.  
*Earth Science/Remote Sensing (B4 Project- Southern San Andreas and San Jacinto Faults)*
27. Pelletier, J. D., & Orem, C. A. (2014). How do sediment yields from post-wildfire debris-laden flows depend on terrain slope, soil burn severity class, and drainage basin area? Insights from airborne-LiDAR change detection. *Earth Surface Processes and Landforms*, v. 39(13), p. 1822-1832 doi:10.1002/esp.3570.  
*Earth Science*
28. Prush, V., and Lohman, R, 2014, Forest canopy heights in the pacific northwest based on InSAR phase discontinuities across short spatial scales: *Remote Sensing*, v. 6(4), p. 3210-3226, doi:10.3390/rs6043210.  
*Remote Sensing (Oregon Department of Geology and Mineral Industries Lidar Program Data, San Gabriel Mountains, CA: Tectonics and Topography , Shuttle Radar Topography Mission)*
29. Rieg, L., Wichmann, V., Rutzinger, M., Sailer, R., Geist, T., and Stötter, J., 2014, Data infrastructure for multitemporal airborne LiDAR point cloud analysis—Examples from physical geography in high mountain environments: *Computers, Environment and Urban Systems*, v. 45, p. 137-146, doi:10.1016/j.compenvurbsys.2013.11.004.  
*Computer Science*
30. Scharer, K. M., Salisbury, J. B., Arrowsmith, J. R., and Rockwell, T. K., 2014, Southern San Andreas Fault evaluation field activity: approaches to measuring small geomorphic offsets—challenges and recommendations for active fault studies: *Seismological Research Letters*, v. 85(1), p. 68-76, doi:10.1785/0220130108.  
*Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)*
31. Scharer, K., Weldon, R., Streig, A., & Fumal, T., 2014, Paleoearthquakes at Frazier Mountain, California delimit extent and frequency of past San Andreas Fault ruptures along 1857 trace: *Geophysical Research Letters*, v. 41(13), p. 4527-4534.  
*Earth Science*

32. Swetnam, T.L., and Falk, D.A., 2014, Application of metabolic scaling theory to reduce error in local maxima tree segmentation from aerial LiDAR: *Forest Ecology and Management*, v. 323, p. 158-167, doi:10.1016/j.foreco.2014.03.016.  
*Earth Science (Jemez River Basin Snow-off & Snow-on Lidar Surveys, CZO)*
33. Schellekens, J., Broolsma, R.J., Dahm, R.J., Donchyts, G.V., Winsemius, H.C., 2014, Rapid setup of hydrological and hydraulic models using OpenStreetMap and the SRTM derived digital elevation model: *Environmental Modeling & Software*, v. 61, p. 98-105, doi:10.1016/j.envsoft.2014.07.006.  
*Geography (Shuttle Radar Topographic Mission)*
34. Shorter, N.S., Smith, O., Smith, P., and Rahmes, 2014, Graph segmentation and support vector machines for bare earth classification from lidar: *in Proceedings, SPIE 9080, Laser Radar Technology and Applications XIX; and Atmospheric Propagation XI*, doi:10.1117/12.2050439.  
*Computer Sciences/Remote Sensing (B4 Project, Southern San Andreas & San Jacinto Faults)*
35. Streig, A. R., Dawson, T. E. and Weldon, R., 2014, Paleoseismic evidence of the 1890 and 1838 earthquakes on the Santa Cruz Mountains section of the San Andreas fault, near Corralitos, California: *Bulletin of the Seismological Society of America*, v. 104(1), p. 285-300, doi:10.1785/0120130009.  
*Earth Science (Northern San Andreas Fault, EarthScope Northern California LiDAR Project)*
36. Tarolli, Paolo, 2014, 2014, High-resolution topography for understanding Earth surface processes: Opportunities and challenges: *Geomorphology*, v. 216, p. 295-312, doi:10.1016/j.geomorph.2014.03.008.  
*Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)*
37. Wyrick, J. R., Senter, A. E., and Pasternack, G. B., 2014, Revealing the natural complexity of fluvial morphology through 2D hydrodynamic delineation of river landforms: *Geomorphology*, v. 210, p. 14-22, doi:10.1016/j.geomorph.2013.12.013.  
*Earth Science*
38. Yan, Yiming, et al, 2014, A stereo remote sensing feature selection method based on artificial bee colony algorithm: *SPIE Sensing Technology+ Applications*, v. 9124, doi:10.1117/12.2055024.  
*Computer Science/Remote Sensing*
39. Youn, C., Nandigam, V., Phan. M., Tarboton, D., Wilkins-Siehr, N., Baru, C., Crosby, C., Padmanabhan, A., and Wang, S., 2014, Leveraging XSEDE HPC resources to address computational challenges with high-resolution topography data: *in Proceedings, Annual Conference on Extreme Science and Engineering Discovery Environment*, doi:10.1145/2616498.2616564.  
*Computer Science*



## 2015

1. Aryal, A., Brooks, B. A., and Reid, M.E., 2015, Landslide subsurface slip geometry inferred from 3D surface displacement fields: *Geophysical Research Letters*, v. 46(5), p. 1411-1417, doi:10.1002/2014GL062688.  
*Earth Science*
2. Bariščin, I., Hinojosa-Corona, A., and Parsons, B., 2015, Co-seismic vertical displacements from a single post-seismic lidar DEM: example from the 2010 El Mayor-Cucapah earthquake: *Geophysical Journal International*, v. 202(1), p. 328-346, doi:10.1093/gji/ggv139.  
*Earth Science (El Mayor-Cucapah)*
3. Carter, W. E., Glennie, C. L., and Shrestha, R. L., 2015, Geodetic imaging by airborne LiDAR: a golden age in geodesy-a bonanza for related sciences: *International Association of Geodesy Symposia*, doi:10.1007/1345\_2015\_121.  
*Remote Sensing*
4. Conway, S. J., Balme, M. R., and Kreslavsky, M. A., 2015, The comparison of topographic long gullies on earth to gullies on Mars: A signal of water on Mars: *Icarus*, v. 253, p. 189-204, doi:10.1016/j.icarus.2015.03.009.  
*Remote Sensing*
5. DiBiase, R.A., Whipple, K.X., Lamb, M.P., Heimsath, A.M., 2015, The role of waterfalls and knickzones in controlling the style and pace of landscape adjustment in the western San Gabriel Mountains, CA: *Geological Society of America Bulletin*, doi:10.1130/B31113.1.  
*Earth Science (San Gabriel, CA)*
6. Gold, P.O., Behr, W.M., Rood, D., Sharp, W.D., Rockwell, T.K., Kendrick, K., and Salin, A., 2015, Holocene geologic slip rate for the Banning strand of the southern San Andreas Fault, southern California: *Journal of Geophysical research: Solid Earth*, Accepted July 2015, doi:10.1002/2015JB012004  
*Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)*
7. Gomez-Gutierrez, A., Conoscenti, C., Angileri, S.E., Rotigliano, E., and Schnabel, S., 2015, Using topographical attributes to evaluate gully erosion proneness (susceptibility) in two Mediterranean basins: Advantages and limitations: *Natural Hazards*, v. 37, doi:10.1007/s11069-015-1703-0.  
*Geography*
8. Griffith, K.T., Ponette-Gonzales, A.G., Curran, L.M., and Weathers, K.C., 2015, Assessing the influence of topography and canopy structure on Douglas Fir throughfall with LiDAR and empirical data in the Santa Cruz Mountains, USA: *Environmental Monitoring and Assessment*, doi:10.1007/s10661-015-4486-0.  
*Earth Science*
9. Grohman, C.H., 2015, Effects of spatial resolution on slope and aspect derivation for regional-scale analysis: *Computers and Geosciences*, v. 77, p. 111-117, doi:10.1016/j.cageo.2015.02.003

*Geography*

10. Guzy, M., Richardson, K., and Lambrinos, J. G., 2015, A tool for assisting municipalities in developing riparian shade inventories: *Urban Forestry & Urban Greening*, v. 14(2), p. 345-353, doi:10.1016/j.ufug.2015.02.012.  
*Earth Science (Oregon Department of Geology and Mineral Industries Lidar Program Data)*
11. Handwerker, A. L., Roering, J. J., Schmidt, D. A., and Rempel, A. W., 2015, Kinematics of earthflows in the northern California coast ranges using satellite interferometry: *Geomorphology*, doi:10.1016/j.geomorph.2015.06.003.  
*Earth Science (Eel River, CA)*
12. Harpold, A.A., Marshall, J.A., Lyon, S.W., Barnhart, T.B., Fisher, B.A., Donovan, M., Brubaker, K.M., Crosby, C.J., Glenn, N.F., Glennie, C.L., Kirchner, P.B., Lam, N., Mankoff, K.D., McCreight, J.L., Molotch, N.P., Musselman, K.N., Pelletier, J., Russo, T., Sangireddy, H., Sjöberg, Y., Swetnam, T., and West, N., 2015, Laser vision: lidar as a transformative tool to advance critical zone science: *Hydrol. Earth Syst. Sci.*, 19, 2881-2897, doi:10.5194/hess-19-2881-2015.
13. Ivancic, M., Mihajlovic, Z., and Ivancic, I., 2015, Seismic data visualization: *in Proceedings, International Convention on Information and Communication Technology, Electronics and Microelectronic*, 38<sup>th</sup>, doi:765501.DCVIS\_29\_3134.  
*Computer Science/Earth Science (SRTM Croatia)*
14. Johnstone, S. A., and Hilley, G. E., 2015, Lithologic control on the form of soil-mantled hillslopes: *Geology*, v. 43(1), p. 83-86.  
*Earth Science*
15. Jung, J., and Pijanowski, B.C., 2015, LiDARHub: A free and open source software platform for web-based management, visualization, and analysis of LiDAR data: *Geosciences*, doi:10.1007/s12303-015-0003-8.  
*Computer Science*
16. Kitlasten, W., and Fogg, G.E., 2015, Hydrogeology of a groundwater sustained montane peatland: Grass Lake, California: *Wetlands Ecology and Management*, doi:10.1007/s11273-015-9422-6.  
*Earth Science (Grass Lake, Lake Tahoe, CA)*
17. Lyon, S. W., Nathanson, M., Lam, N., Dahlke, H. E., Rutzinger, M., Kean, J. W., & Laudon, H., 2015, Can low-resolution airborne laser scanning data be used to model stream rating curves?: *Water*, v. 7(4), p. 1324-1339, doi:10.3390/w7041324.  
*Earth Science (Krycklan, Sweden)*
18. Ma, L., Sacks R., Zeibak-Shini, R., Aryal, A., and Pilin, S., 2015, Preparation of synthetic as-damaged models for post-earthquake BIM reconstruction research: *Journal of Computing in Civil Engineering*, doi:10.1061/(ASCE)CP.1943-5487.0000500.  
*Geography*

19. Milodowski, D. T., Mudd, S. M., and Mitchard, E. T., 2015, Topographic roughness as a signature of the emergence of bedrock in eroding landscapes: *Earth Surface Dynamics*, doi:10.5194/esurfd-3-371-2015.  
*Earth Science (Salmon River Idaho, Bald Rock Basin, California, etc.)*
  
20. Nippgen, F., McGlynn, B. L., and Emanuel, R. E., 2015, The spatial and temporal evolution of contributing areas: *Water Resources Research*, AGU, doi:10.1002/2014WR016719.  
*Earth Science (Tenderfoot creek, Montana)*
  
21. Orem, C. A., & Pelletier, J. D., 2015, Quantifying the time scale of elevated geomorphic response following wildfires using multi-temporal LiDAR data: An example from the Las Conchas fire, Jemez Mountains, New Mexico: *Geomorphology*, v. 232, p. 224-238, doi:10.1016/j.geomorph.2015.01.006.  
*Earth Science/Remote Sensing (Jemez, NM)*
  
22. Passalacqua, P., Belmont, P., Staley, D.M., Simley, J.D., Arrowsmith, J.R., Bode, C.A., Crosby, C., DeLong, S.B., Glenn, N.F., Kelly, S.A., Lague, D., Sangireddy, H., Schaffrath, K., Tarboton, D.G., Wasklewicz, T., and Wheaton, J.M., 2015, Analyzing high resolution topography for advancing the understanding of mass and energy transfer through landscapes: A review: *Earth Science Reviews*, doi:10.1016/j.earscirev.2015.05.012.  
*Earth Science*
  
23. Teran, O. J., Fletcher, J. M., and Oskin, M. E., 2015, Geologic and structural controls on rupture zone fabric: a field-based study of the 2010  $M_w$  7.2 El Mayor-Cucapah earthquake surface rupture: *Geosphere*, v. 11(3), p. 899-920, doi:10.1130/GES01078.1.  
*Earth Science (El Mayor-Cucapah)*
  
24. Tomljenovic, I., Höfle, B., Tiede, D., & Blaschke, T., 2015, Building extraction from airborne laser scanning data: An analysis of the state of the art: *Remote Sensing*, v. 7(4), p. 3826-3862, doi:10.3390/rs70403826..  
*Remote Sensing*
  
25. Zahawi, Rakan A., Dandois, J.P., Holl, K.D., Nadwodny, D., Reid, J.L., and Ellis, E.C., 2015, Using lightweight unmanned aerial vehicles to monitor tropical forest recovery: *Biological Conservation*, v. 186, p. 287-295, doi:10.1016/j.biocon.2015.03.031.  
*Earth Science/Remote Sensing*
  
26. Zheng, X., Xiong, H., Gong, J., and Yue, L., 2015, A robust channel network extraction method combining discrete curve evolution and the skeleton construction technique: *Advances in Water Resources*, v. 83, p. 17-27, doi:10.1016/j.advwatre.2015.05.003.  
*Earth Sciences (EarthScope Northern California LiDAR Project)*

## Theses

## **2006**

1. Crosby, C.J. 2006, A Geoinformatics Approach to LiDAR Data Distribution and Processing with Applications to Geomorphology [M.S. Thesis]: Tempe, Arizona, Arizona State University.  
*Earth Science/Computer Science*

## **2010**

1. Feigelson, L., 2010, Slip rate on the Peninsula San Andreas Fault, San Mateo County, California [Ph.D. Thesis]: San Francisco, California, San Francisco State University.  
*Earth Science (B4)*
2. Foster, M., 2010, Knickpoints in tributaries of the South Fork Eel River, northern California [M.S. Thesis]: Humboldt State University.  
*Earth Science (Eel River, CA)*

## **2011**

1. Robinson, S.E., 2011, Integrating LiDAR topography into the study of earthquakes and faulting [M.S. Thesis]: Tempe, Arizona, Arizona State University.  
*Earth Science/Remote Sensing*

## **2012**

1. Dong, P., 2012, Quantitative comparison of LiDAR data and user-generated three-dimensional building models from Google Building Maker<sup>®</sup> [Ph. D. Thesis]: University of North Texas.  
*Computer Science*
2. Schrijvers, O., 2012, Insertions and deletions in Delaunay Triangulations using guided point location [M.S. Thesis]: Technische Universiteit Eindhoven.  
*Computer Science*
3. Winter, T., 2012, Mass wasting in the Yakima River Canyon, Washington: An inventory and hazard assessment [Ph. D. Thesis]: Central Washington University.  
*Earth Science*

## **2013**

1. Basgall, P. L., 2013, Lidar point cloud and stereo image point cloud fusion [Ph. D. Thesis]: Monterey, California, Naval Postgraduate School.  
*Computer Science (San Diego, 2005, Haiti)*
2. Dong, P., 2013, Automated treetop detection and tree crown identification using discrete-return LiDAR data [Ph. D. Thesis]: University of North Texas.  
*Earth Science/Remote Sensing (EarthScope NoCal)*
3. Ewald, Michael J., 2013, Where's the ground surface? Elevation bias in LIDAR-derived digital elevation models due to dense vegetation in Oregon tidal marshes [M.S. Thesis]: Oregon State University.  
*Remote Sensing/Earth Science (DOGAMI)*

4. Gorum, T., 2013, Towards a better understanding of earthquake triggered landslides: An analysis of the size, distribution pattern and different tectonic and geomorphic environments [Ph.D. Thesis]: Mus, Turkey, University of Twente.  
*Earth Science (EarthScope Alaska Denali Totschunda LiDAR Project)*
5. Sedki, Ziad, 2013, LiDAR and field investigation along the San Andreas Fault, San Bernardino/Cajon Pass area, Southern California [M.S. Thesis]: Long Beach, CA, California State University.  
*Earth Science (B4)*
6. Swetnam, Tyson L., 2013, Cordilleran forest scaling dynamics and disturbance regimes quantified by aerial lidar [M.S. Thesis]: Tucson, Arizona, The University of Arizona.  
*Earth Science (Valles Caldera CZO)*
7. Wolf, E. M. (2013). Quaternary deformation of the middle pleistocene Christmas Canyon Formation and its implications for neotectonic processes associated with the Garlock Fault and Eastern California Shear Zone [Ph.D. Thesis]: Los Angeles, CA, The University of California.  
*Earth Science (ECSZ)*

#### **2014**

1. Ivančić, Matejka., 2014, Vizualizacija Seizmickih Podataka [Ph.D. Thesis]: Bosnia, Sveuciliste U Zagrebu.  
*Earth Science (SRTM)*
2. Oroza, C., Zheng, Z., Glaser, S.D., 2014, Optimization of Sensor Placements Using Machine Learning and LIDAR data: a Case Study for a Snow Monitoring Network in the Sierra Nevada: *in* Proceedings, American Geophysical Union, C43D-0412.  
*Earth Science (Sierra Nevadas)*
3. Sousa, F., Akciz, S. O., Harvey, J. C., 2014, Field and LiDAR observations of the Hector Mine California 1999 surface rupture: *in* Proceedings, American Geophysical Union, T33E-04.  
*Earth Science (Hector Mine)*
4. Wicker, Cary, 2014, Tectonic geomorphology of the San Timoteo Badlands: New insights from OSL and LiDAR data [Ph.D. Thesis]: Long Beach, California, California State University.  
*Earth Science (B4)*

#### **2015**

1. Jara-Munoz, J., Melnick, D., Strecker, M., 2015, TerraceM<sup>®</sup>: a Matlab<sup>®</sup> tool for the analysis of marine terraces: *in* Proceedings, European Geosciences Union, doi: 10.1130/GES00702.S1.  
*Earth Science/Computer Science (Santa Cruz)*
2. Kelleher, Christa, Wagener, T. McGlynn, B., 2015, Model-based analysis of the influence of catchment properties on hydrologic partitioning across five mountain headwater subcatchments: Water Resources Research, AGU, doi:10.1002/2014WR016147.  
*Earth Science (Tenderfoot Creek)*

- Ottow, B.P., 2015, Spatial allocation of micro hydropower sites using freely available datasets: application in southern Mindanao, Philippines [M.S. thesis]: Wageningen, Netherlands, Wageningen University and Research Centre, 44 p., doi:10.13140/RG.2.1.4567.4407.  
*Urban Planning/Geography/Remote Sensing*

## Reports & White Papers

### 2009

- Community Surface Dynamics Modeling System (CSDMS), 2009, CSDMS semi-annual report, July 30, 2009,  
[http://csdms.colorado.edu/mediawiki/images/2009\\_CSDMS\\_semiannual\\_report.pdf](http://csdms.colorado.edu/mediawiki/images/2009_CSDMS_semiannual_report.pdf)  
*Earth Science*
- New Mexico Experimental Program to Stimulate Competitive Research (NM EPSCoR), 2009, NM EPSCoR RII3: Climate change impacts on New Mexico's mountain sources of water.  
<http://nmepscor.org/sites/all/documents/reports/NSFYear1ARBody.pdf>  
*Earth Science*

### 2010

- Brandenberg, S. J., Fletcher, J., Gingery, J. R., Hudnut, K. W., McCrink, T., Meneses, J. F., Murbach, D., Rockwell, T. K., Stewart, J. P., and Tinsley, J., 2010, Preliminary report on seismological and geotechnical engineering aspects of the April 4 2010 Mw 7.2 El Mayor-Cucupah (Mexico) earthquake, Version 1, Chapter 2, GEER-023.  
[http://www.geerassociation.org/GEER\\_Post%20EQ%20Reports/Baja%20California\\_2010/Baja\\_Index\\_2010.html](http://www.geerassociation.org/GEER_Post%20EQ%20Reports/Baja%20California_2010/Baja_Index_2010.html)  
*Earth Science*
- Crosby, C.J. 2010, Cyber-GIS Opportunities for High-Resolution Topography Data Access, Processing, and Analysis, Position paper submitted to NSF Teragrid Workshop on CyberGIS,  
[http://www.cigi.illinois.edu/cybergis/docs/Crosby\\_Position\\_Paper.pdf](http://www.cigi.illinois.edu/cybergis/docs/Crosby_Position_Paper.pdf)  
*Computer Science*
- Manners, R., and Kilham, N., 2010, How 1D and 2D models can be used to test design hypotheses related to floodplain inundation.  
[http://cnr.usu.edu/streamrestoration/files/uploads/Part%202%202010%20Resources/Manners\\_Kilham.pdf](http://cnr.usu.edu/streamrestoration/files/uploads/Part%202%202010%20Resources/Manners_Kilham.pdf)  
*Earth Science*
- Mitchell, G., 2010, PhotoSat WorldView-2 stereo satellite DEM comparison to a LiDAR DEM over the Garlock fault in southeast California.  
[http://www.photosat.ca/pdf/photosat\\_ge\\_lidar\\_comparison\\_2009dec.pdf](http://www.photosat.ca/pdf/photosat_ge_lidar_comparison_2009dec.pdf)  
*Earth Science*
- Rathje, E., Bachhuber, J., Cox, B., French, J., Green, R., Olson, S., Rix, G., Wells, D., Suncar, O., Harp, E., Mann, P., and Koehler, R., 2010, Geotechnical engineering reconnaissance of the 2010

Haiti earthquake - Version1: February 22, 2010.

[http://www.geerassociation.org/GEER\\_Post%20EQ%20Reports/Haiti\\_2010/0-GEER%20Web%20Report%20Version%201/Haiti%20Report%202010.pdf](http://www.geerassociation.org/GEER_Post%20EQ%20Reports/Haiti_2010/0-GEER%20Web%20Report%20Version%201/Haiti%20Report%202010.pdf)

*Earth Science*

6. Treiman, J. A., Perez, F. G., and Bryant, W. A., 2010, Utility of combined aerial photography and digital imagery for fault trace mapping in diverse terrain and vegetation regimes, USGS Award No. 08HQGR0096.

*Earth Science*

7. Working Group on California Earthquake Probabilities (WGCEP), 2010, The uniform California earthquake rupture forecast, version 3 (UCERF3) Project plan methodology assessment – proposed solutions to issues. [http://wgcep.org/sites/wgcep.org/files/UCERF3\\_Report2.pdf](http://wgcep.org/sites/wgcep.org/files/UCERF3_Report2.pdf)

*Earth Science*

## **2011**

1. Baldwin, J. N., Kozaci, O., Zachariassen, J., and C., P., 2011, Paleoseismic investigations of Holocene earthquake recurrence on the peninsula segment of the San Andreas fault, Woodside, CA: Collaborative research with Fugro William Lettis & Associates and the United States Geological Survey, Joint Project with Judy Zachariassen, URS Corporation.

<http://earthquake.usgs.gov/research/external/reports/06HQGR0195.pdf>

*Earth Science*

2. Carignan, K. S., Taylor, L. A., Eakins, B. W., Caldwell, R. J., Friday, D. Z., Grothe, P. R., and Lim, E., 2011, Digital elevation models of Central California and San Francisco Bay: Procedures, data sources and analysis, NOAA Technical Memorandum NESDIS NGDC-52.

[http://docs.lib.noaa.gov/noaa\\_documents/NESDIS/NGDC/TM/NOAA\\_TM\\_NESDIS\\_NGDC\\_52.pdf](http://docs.lib.noaa.gov/noaa_documents/NESDIS/NGDC/TM/NOAA_TM_NESDIS_NGDC_52.pdf)

*Earth Science*

3. Crosby, C.J., Arrowsmith, J R., Baru, C., 2011, EarthCube and Cyberinfrastructure for the Earth Sciences: Lessons and Perspective from OpenTopography, Whitepaper submitted to NSF EarthCube Workshop,

<http://earthcube.ning.com/group/technology-solutions/forum/attachment/download?id=6435147%3AUploadedFile%3A5371>

*Computer Science*

4. Haddad, David, 2011, Measuring earthquake-generated surface offsets from high-resolution digital topography, Tempe, Arizona, Arizona State University.

*Earth Science/Remote Sensing*

5. National Oceanic and Atmospheric Administration (NOAA), 2011, West Coast digital elevation models: Coastal models supporting our nation's needs through science and technology.

[http://www.ngdc.noaa.gov/mgg/coastal/us\\_westcoast\\_dem\\_catalog.pdf](http://www.ngdc.noaa.gov/mgg/coastal/us_westcoast_dem_catalog.pdf)

*Earth Science*

6. Krishnan, S., Tatineni, M., & Baru, C., 2011, My Hadoop-Hadoop-on-Demand on Traditional HPC Resources. San Diego Supercomputer Center Technical Report TR-2011-2, University of California, San Diego.  
*Computer Science*
7. Zachariassen, J., Baldwin, J. N., Kozaci, O., and Prentice, C., 2011, Paleoseismic investigations of Holocene earthquake recurrence on the peninsula segment of the San Andreas fault, Woodside, CA: Collaborative research with URS Corporation and the United States Geological Survey; Joint project with John Baldwin and OZgur Kozaci, Fugro William Lettis and Associates.  
<http://earthquake.usgs.gov/research/external/reports/G09AP00048.pdf> (*earth science*)  
*Earth Science*

### 2013

1. Chen, R., Dawson, T. E., & Wills, C. J. (2013). Quantifying Surface Fault Rupture Location Uncertainty for Lifeline Crossings.  
*Earth Science (NorCal GeoEarthScope)*
2. Scharer, K., & Fumal, T., 2013, Determining slip per event on the San Andreas fault from fold deformation at the Frazier Mountain site.  
*Earth Science (B4)*
3. Streig, A. R., Weldon II, R. J., & Dawson, T. E. (2013). Refining Earthquake Recurrence and Slip Over the Past 4-5 events on the Southern Santa Cruz Mountains Segment of the San Andreas Fault.  
*Earth Science (GeoEarthScope NorCal)*

### 2014

1. Gillich, Jennifer, and Lichvar, R., Use of LiDAR to Assist in Delineating Waters of the United States, Including Wetlands: No. ERDC/CRREL-TR-14-3. Engineer research and development center: Hanover NH Cold Regions Research and Engineering Lab.  
*Earth Science/Remote Sensing (NW Nevada: Modeling of Meander Channel Evolution)*
2. Hudnut, K.W., Brocher, T.M., Prentice, C.S., Boatwright, J., Brooks, B.A., Aagaard, B.T., Blair, J.L., Fletcher, J.B., Erdem, J.E., Wicks, C.W., Murray, J.R., Pollitz, F.F., Langbein, J., Svarc, J., Schwartz, D.P., Ponti, D.J., Hecker, S., DeLong, S., Rosa, C., Jones, B., Lamb, R., Rosinski, A., McCrink, T.P., Dawson, T.E., Seitz, G., Rubin, R.S., Glennie, C., Hauser, D., Ericksen, T., Mardock, D., Hoirup, D.F., and Bray, J.D., 2014, Key recovery factors for the August 24, 2014, South Napa earthquake: U.S. Geological Survey Open-File Report 2014–1249, p. 51,  
<http://dx.doi.org/10.3133/ofr20141249>.  
*Earth Science*

### 2015

1. Bowman, S. D., & Lund, W. R., 2015, 2013-2014 Utah earthquake working groups.  
*Earth Science*



2. Niemi, N., Wang, B. The Role of UNAVCO in Geodesy and Field Education.  
*Earth Science*
3. Perez, Florante G., Bryant, William A., 2015, The San Andreas Fault in the Mescal Creek and Mount San Antonio 7.5' quadrangles, Los Angeles and San Bernadino counties, California: California Geological Survey, fault evaluation report, FER 251, doi:10.13140/RG.2.1.1408.2723.  
*Earth Science*