

Peer-Reviewed and Other Publications based on OpenTopography Facility Support

Updated: July 14, 2015

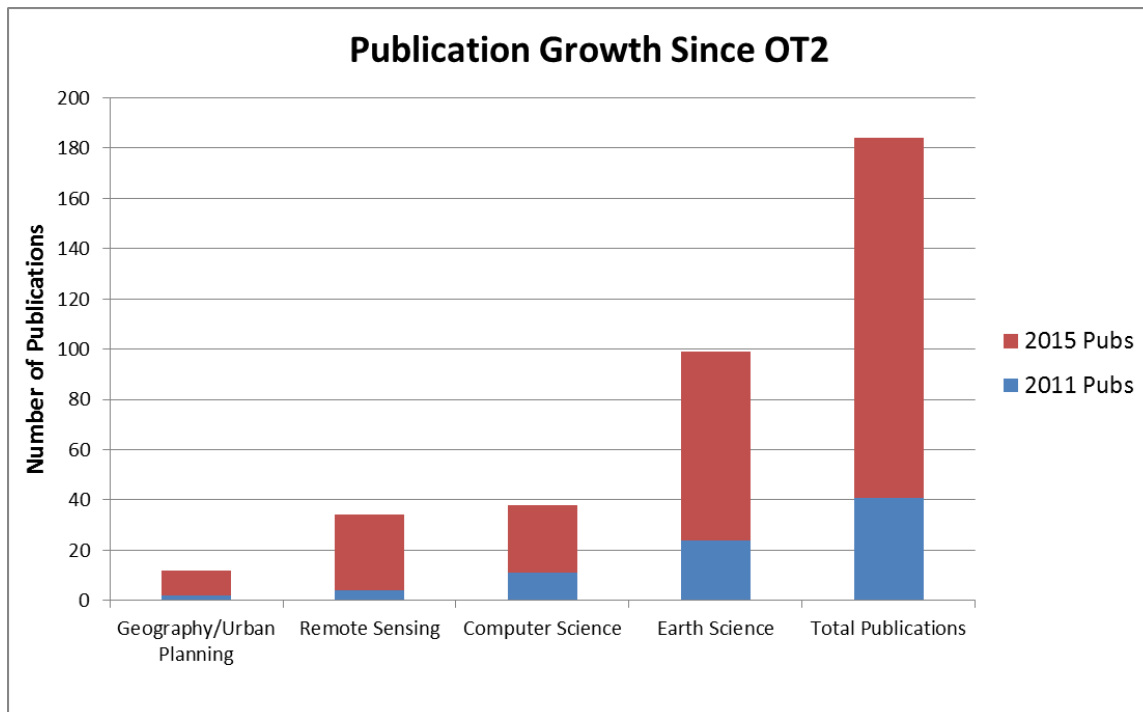
This is a bibliography of peer-reviewed publications and other published documents (reports, theses, etc.) enabled by data access, online data processing, and education and training materials available through the National Science Foundation supported OpenTopography Facility (including the GEON Lidar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

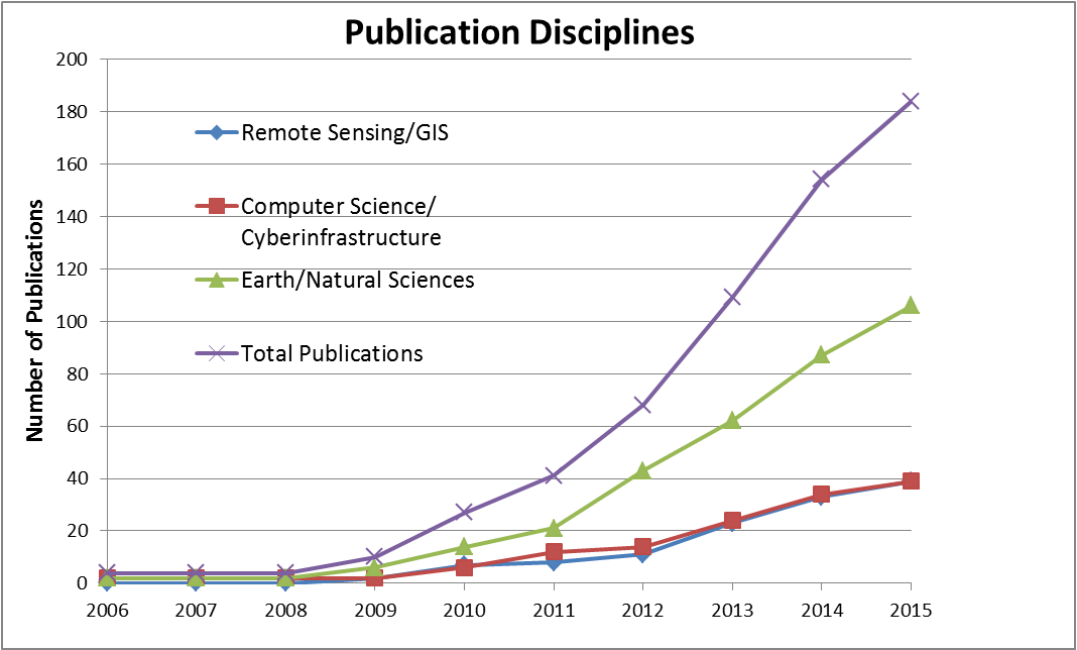
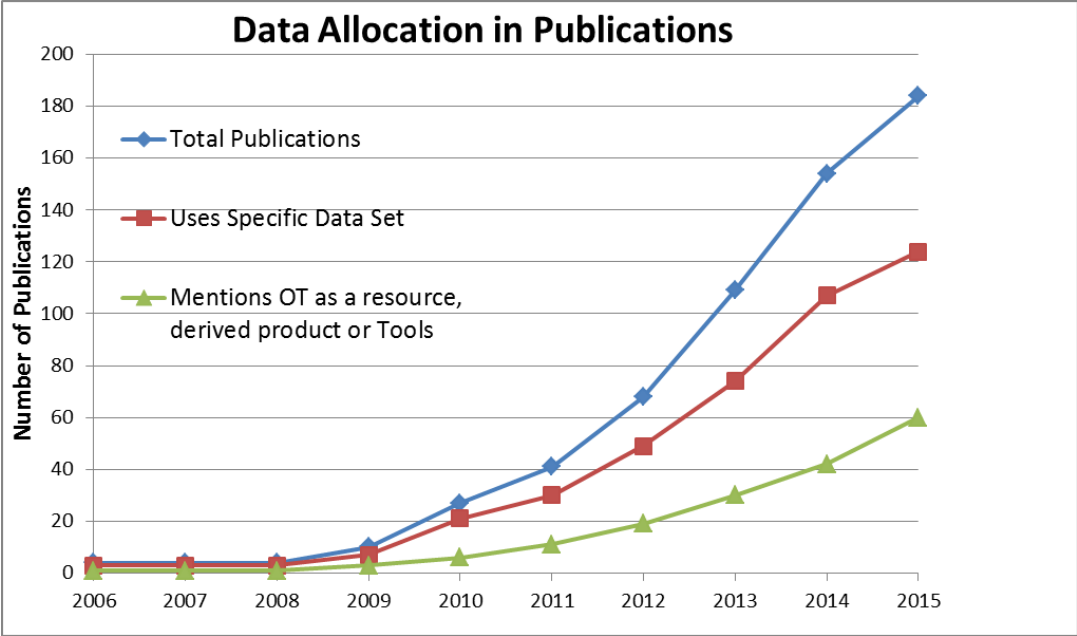
The impact of OpenTopography spans numerous disciplines spanning the earth and natural sciences, remote sensing, computer science, and geographic information science. OpenTopography has also enabled technical reports and other publications from government agencies and commercial-sector organizations.

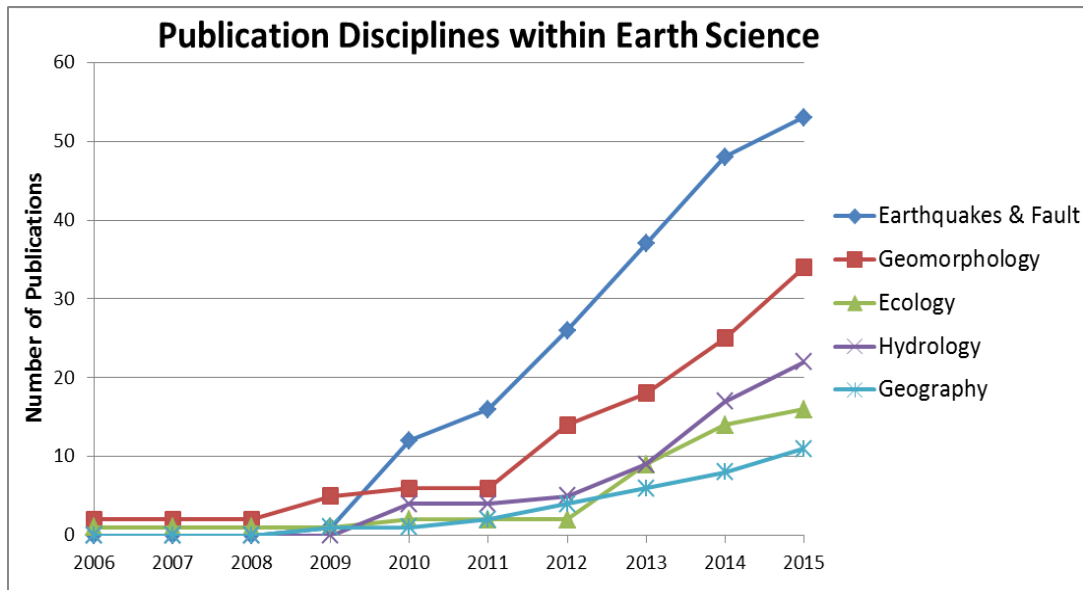
The bibliography compiled below is based on Web of Science and Google Scholar searches as well as reports from members of the OpenTopography community. Citations are in GSA format with accompanying [DOIs](#) and an italicized description of what subject, application and/or dataset was used in the publication.

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., Blaszczyński 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 an 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 (ALS) 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, 2nd, 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., Yıkmaz, 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. Ganey, 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*, 3rd, 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, 1st, 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), 10th 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

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Geography (South Fork Eel River, CA Watershed Morphology,,South Fork Eel River, CA)
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Earth Science/Remote Sensing (Christiana River basin, Iowa river, NMSZ, Owyhee River, Mojave, CA)
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Computer Science (DEM access and use of Opal2 SOAP, OGC WPS and OGC CSW)
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Remote Sensing (Oregon Department of Geology and Mineral Industries Lidar Program Data, San Gabriel Mountains, CA: Tectonics and Topography , Shuttle Radar Topography Mission)
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Earth Science (B4 Project- Southern San Andreas and San Jacinto Faults)
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Earth Science

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Earth Science (Jemez River Basin Snow-off & Snow-on Lidar Surveys, CZO)
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Geography (Shuttle Radar Topographic Mission)
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Earth Science (Northern San Andreas Fault, EarthScope Northern California LiDAR Project)
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Earth Science
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Computer Science/Remote Sensing
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Computer Science

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Earth Science
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Earth Science (El Mayor-Cucapah)
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Earth Science (San Gabriel, CA)
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Geography
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Geography
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Earth Science (Oregon Department of Geology and Mineral Industries Lidar Program Data)
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Earth Science (Eel River, CA)

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Computer Science/Earth Science (SRTM Croatia)
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Earth Science
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Computer Science
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Earth Science (Grass Lake, Lake Tahoe, CA)
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Earth Science (Krycklan, Sweden)
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Geography
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Earth Science (Salmon River Idaho, Bald Rock Basin, California, etc.)
19. 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)

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Earth Science/Remote Sensing (Jemez, NM)
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Earth Science
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Earth Science (El Mayor-Cucapah)
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Remote Sensing
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Earth Science/Remote Sensing
25. 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.advwatres.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® [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)
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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[®]: a Matlab[®] 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)
3. Ottow, B.P., 2015, Spatial allocation of micro hydropower sites using freely available datasets: application in southern Mindanao, Philipines [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

1. 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
Earth Science
2. 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

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