

## Christopher Crosby

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### EDUCATION

ARIZONA STATE UNIVERSITY, Tempe, AZ:

Ph.D. course work, School of Earth and Space Exploration, Fall 2006 – Winter, 2007

*Dissertation advisor:* Dr. J Ramon Arrowsmith.

M.S. Geological Sciences, August 2006

*Thesis Title:* A geoinformatics approach to LiDAR data distribution and processing with applications to geomorphology. *Thesis advisor:* Dr. J Ramon Arrowsmith.

WHITMAN COLLEGE, Walla Walla, WA:

B.A., Geology with Honors in Major Study, May 2000

*Honors Thesis:* Reassessment of the 1906 earthquake and paleoseismology of the San Andreas fault, Doda Ranch, Northern California *Thesis advisors:* Dr. Carol Prentice (USGS) and Dr. Kevin Pogue (Whitman College)

### EMPLOYMENT

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| 2009 - present | Project Manager, OpenTopography Facility, San Diego Supercomputer Center, University of California, San Diego.   |
| 2008 - 2009    | Geoscience Coordinator, GEON Project, San Diego Supercomputer Center, University of California, San Diego.   |
| 2004 - 2009    | Project Manager & Graduate Research Assistant, GEON LiDAR Workflow project, Arizona State University / San Diego Supercomputer Center (SDSC), University of California, San Diego. |
| 2000 - 2003    | Intern/Research Assistant, Western Earthquake Hazards Team, U.S. Geological Survey, Menlo Park   |

### HONORS

The Troy L. Pewe Vision Fellowship in Quaternary Studies, Arizona State University, 2006-2007

Geological Society of America (GSA) Graduate Student Research Award: April, 2005

Arizona State University Graduate and Professional Student Association Travel Grant: December, 2004

International Lithosphere Program (ILP) young scientist travel grant: Ten years of paleoseismology in the ILP, Kaikoura, NZ: December, 2001

Indiana University Geologic Field Camp "Top Student Award": summer 2000

Albert Ripley Leeds Prize in Geology, Whitman College: spring 2000

Sally Ann Abshire Grant for research with a professor, Whitman College: 1998-1999

### PUBLICATIONS

#### Refereed:

Crosby, C.J., Baru, C., Nandigam, V., Minor, D., Kozbial, A., *in preparation*, Lidar Data Citation, Archive, and Curation, GeoCarto Special Issue on Current Trends in LiDAR Data Processing

- Baru, C., Crosby, C.J., Nandigam, V., *in preparation*, Federated Access to Lidar Data Repositories, GeoCarto Special Issue on Current Trends in LiDAR Data Processing
- Crosby, C.J., *accepted*, Lidar and Google Earth: Simplifying Access to High-Resolution Topography Data, Geological Society of America Special Paper on Google Earth in Earth Science Research and Education.
- Crosby, C.J., Arrowsmith, J R., Krishnan, S., Kim, H.S., Colunga, J., Alex, N., Baru, C., *in review*, Points2Grid: An Efficient Local Gridding Method for DEM Generation from Lidar Point Cloud Data, GeoSphere special issue on Lidar in the Earth Sciences.
- 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 of the 2nd International Conference on Computing for Geospatial Research & Applications (COM.Geo '11), AMC, 8 p. DOI=10.1145/1999320.1999327
- 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.
- Altintas, I., Crawl, D., Crosby, C.J., 2011, Scientific Workflows for the Geosciences: An Emerging Approach to Building Integrated Data Analysis Systems, *in*, Geoinformatics, R. Keller and C. Baru, Eds., Cambridge University Press, London.
- Krishnan, S., Baru, C., Crosby, C.J., 2010, Evaluation of MapReduce for Gridding LIDAR Data, Proceedings of 2<sup>nd</sup> IEEE International Conference on Cloud Computing Technology and Science, pp. 33-40.
- Nandigam, V, Baru, C., and Crosby, C.J., 2010, Database Design for High-Resolution LIDAR Topography Data, *in*, M. Gertz and B. Ludascher, eds.: SSDBM 2010, Lecture Notes in Computer Science 6187, pp. 151–159.
- Prentice, C.S., Weber, J.C., Crosby, C.J., Ragona, D., 2010, Prehistoric earthquakes on the Caribbean–South American plate boundary, Central Range fault, Trinidad, *Geology*; August 2010; v. 38; no. 8; p. 675-678; DOI: 10.1130/G30927.1
- Prentice, C.S., C.J. Crosby, C.S. Whitehill, J R. Arrowsmith, K.P. Furlong, D.A. Phillips, 17 February 2009, Illuminating Northern California’s Active Faults, *Eos*, Vol. 90, No. 7, p. 55-56.
- Jaeger-Frank, E., Crosby, C.J., Memon, A., Nandigam, V., Arrowsmith, J R., Conner, J., Altintas, I., and Baru, C., A Three Tier Architecture for LiDAR Interpolation and Analysis, *Lecture Notes in Computer Science*, Volume 3993, Apr 2006, p. 920-927, DOI: 10.1007/11758532\_123.
- Korjenkov, A. M., Arrowsmith, J R., Crosby, C., Mamyrov, E., Orlova, L. A., Povolotskaya, I. E., Tabaldiev, K., Direct seismogenic destruction of the Kamenka medieval fortress, northern Issyk-Kul region, Tien Shan, *Journal of Seismology*, Special Issue on Archeoseismology, DOI 10.1007/s10950-006-9029-8.
- Toke, N.A., JR. Arrowsmith, J.J. Young, C.J. Crosby (2006) “Paleoseismic and postseismic observations of fault slip along the Parkfield segment of the San Andreas Fault.” *Bulletin of Seismological Society of America* 96, 221-238.
- Crosby, C.J., and Carson, R.J., 1999, The Geology of Steamboat Rock, Grand Coulee, WA: *Washington Geology*, vol. 27, no. 2/3/4, p. 3-8.

#### **Data Publications, Reports & Position Papers:**

- 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>
- 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)
- Crosby, C.J., Prentice, C.S., Weber, J., and Ragona, D., 2009, Logs of paleoseismic excavations

- across the Central Range Fault, Trinidad: U.S. Geological Survey Open-File Report 2009-1228.
- Arrowsmith, J R., Glenn, N., Crosby, C.J., Cowgill, E., 2008, Current capabilities and community needs for software tools and educational resources for use with LiDAR high resolution topography data, Position paper submitted to organizers of the NSF from the Workshop on Studying Earth Surface Processes with High-Resolution Topographic Data, [http://opentopo.sdsc.edu/docs/LIDAR\\_software\\_tools\\_needs\\_Aug\\_2008.pdf](http://opentopo.sdsc.edu/docs/LIDAR_software_tools_needs_Aug_2008.pdf)
- Crosby, C.J., Arrowsmith, J R., 2006, Application of LiDAR Data to Constraining a Late Pleistocene Slip Rate and Vertical Deformation of the Northern San Andreas Fault, Fort Ross to Mendocino, California: Collaborative Research Between Arizona State University and the U.S. Geological Survey, U.S. Geological Survey National Earthquake Hazard Reduction Program Technical Report, 29 pp., <http://earthquake.usgs.gov/research/external/reports/06HQGR0032.pdf>
- Crosby, C. J., 2004, Digital database of faulting accompanying the 1966 Parkfield, California, earthquake: U.S. Geological Survey Open-File Report 2004-1437.

### Theses:

- Crosby, C.J., A Geoinformatics Approach to LiDAR Data Distribution and Processing with Applications to Geomorphology: Tempe, Arizona, Arizona State University, M.S. Thesis.
- Crosby, C.J., Reassessment of the 1906 earthquake and paleoseismology of the San Andreas fault, Doda Ranch, Northern California: Walla Walla, Washington, Whitman College, Undergraduate Honors Thesis.

### Select Abstracts:

- Crosby, C.J., Nandigam, V., Krishnan, K., Cowart, C., Baru, C., Arrowsmith, R., 2011, Leveraging Open Standards and Technologies to Enhance Community Access to Earth Science Lidar Data, Eos Trans. AGU, Fall Meet. Suppl., Abstract N34A-06. (INVITED)
- Crosby, C.J., Blair, J. B., Carabajal, C.C., Haran, T.M., Hofton, M.A., Khalsa, S.S., McWhirter, J., Meertens, C.M., Nandigam, V., 2011, NLAS: Improving the Accessibility and Utility of Lidar Waveform Data in the Earth Sciences, Eos Trans. AGU, Fall Meet. Suppl., Abstract IN54A-07.
- Baru, C., Crosby, C.J., Kozbial, A., Minor, D., 2011, Citation, Curation, and Preservation of Scientific Data: A Case Study Based on Lidar Topographic Data, Eos Trans. AGU, Fall Meet. Suppl., Abstract IN52A-08.
- Crosby, C.J., Nandigam, V., Krishnan, S., Baru, C., Arrowsmith, J R., 2011, OpenTopography: Geospatial Cyberinfrastructure For Lidar Topography Data, Geological Society of America Abstracts with Programs, Vol. 43, No. 5, p. 630.
- Crosby, C.J., Nandigam, V., Krishnan, S., Phan, M., Cowart, C., Arrowsmith, R., Baru, C., 2010, A Scalable Infrastructure for Lidar Topography Data Distribution, Processing, and Discovery, Eos Trans. AGU, Fall Meet. Suppl., Abstract IN32A-05.
- Arrowsmith J. R., and Crosby, C. J., 2010, Meter-scale characterization of surface processes and fault-related deformation using LiDAR topography (INVITED), Eos Trans. AGU, Fall Meet. Suppl., Abstract EP44B-04.
- Robinson, S.E., Arrowsmith, J R., De Groot, R.M., Crosby, C.J., Whiteside, A.S., Colunga, J., 2010, Integrating LiDAR Data into Earth Science Education, Eos Trans. AGU, Fall Meet. Suppl., Abstract ED23B-0723.
- Meertens, C.M., Baru, C., Blari, B., Crosby, C.J., Haran, T.M., Harding, D.J., Hofton, M.A., Khalsa, S.S., McWhirter, J., 2010, Interoperable Data Systems for Satellite, Airborne, and Terrestrial LiDAR Data, Eos Trans. AGU, Fall Meet. Suppl., Abstract IN14A-07.
- Nadeau, D., Baru, C., Fouch, M.J., Crosby, C.J., Data Fusion and Visualization with the OpenEarth Framework (OEF), Eos Trans. AGU, Fall Meet. Suppl., Abstract IN21A-1320.
- Crosby, C.J., 2010, The State Of Online Access To Lidar Topography Data And Future Opportunities (INVITED), Geological Society of America Abstracts with Programs, Vol. 42, No. 5, p. 36
- Crosby, C.J., Arrowsmith J R., Robinson, S. E., LiDAR and Google Earth: Visualizing topography along active faults in high resolution, Geological Society of America Annual meeting, Paper No. 172-14,

2010.

- Prentice, C.S., Mann, P., Crosby, C.J., Koehler, R.D., Pena, L., Crone, A.J., Hudnut, K., Jean, P., 2010, Paleoseismology And Earthquake Hazard In The Caribbean, Geological Society of America Abstracts with Programs, Vol. 42, No. 5, p. 217
- C. J. Crosby; V. Nandigam; R. Arrowsmith; J. L. Blair (2009) Visualization of High-Resolution LiDAR Topography in Google Earth, *Eos Trans. AGU, Fall Meet. Suppl.*, Abstract IN33A-1034.
- Robinson, S.E., Arrowsmith, J R., Crosby, C.J., 2009, Wallace Creek Virtual Field Trip: Teaching Geoscience Concepts with LiDAR, *Eos Trans. AGU, Fall Meet. Suppl.*, Abstract ED51A-0519
- M. Smeekens; C. Baru; G. R. Keller; R. Arrowsmith; C. J. Crosby (2009) Teaching and Training in Geoinformatics: Experiences from the Cyberinfrastructure Summer Institute for Geoscientists (CSIG), *Eos Trans. AGU, Fall Meet. Suppl.*, Abstract IN43E-02.
- V. Nandigam; C. J. Crosby; C. Baru; R. Arrowsmith (2009) Internet-Based Software Tools for Analysis and Processing of LIDAR Point Cloud Data via the OpenTopography Portal, *Eos Trans. AGU, Fall Meet. Suppl.*, Abstract IN51C-02.
- Nadeau, D., Moreland, J., Baru, C., Crosby, C.J., 2009, Getting Beneath the Surface with the OpenEarth Framework (OEF) Virtual Globe, *Eos Trans. AGU, Fall Meet. Suppl.*, Abstract IN43A-1138.
- C J Crosby, J L Blair, V Nandigam, A Memon, C Baru, J R Arrowsmith (2008) KML-Based Access and Visualization of High Resolution LiDAR Topography, *Eos Trans. AGU, 89(52), Fall Meet. Suppl.*, Abstract IN41B-1149.
- Crosby, C.J., Nandigam, V., Arrowsmith, R., Baru, C., 2009, Enhancing Access To High-Resolution Lidar Topography – From Point Clouds To Google Earth, Geological Society of America Abstracts with Programs, Vol. 41, No. 7, p. 384
- C J Crosby, V Nandigam, J R Arrowsmith, S Balakrishnan, N Alex, C Baru (2008) A Cyberinfrastructure Platform for Distribution of GeoEarthScope LiDAR Topography Data, *Eos Trans. AGU, 89(52), Fall Meet. Suppl.*, Abstract IN51A-1146.
- Crosby, C.J., Arrowsmith, J R., Korjenkov, A. M., Guralnik, B., Mamyrov, E., Povolotskaya, I. E., 2007, The Hunt for Surface Rupture From the 1889 Ms 8.3 Chilik Earthquake, Northern Tien Shan, Kyrgyzstan and Kazakhstan, *Eos Trans. AGU, 88(52), Fall Meet. Suppl.*, Abstract T23D-1635
- Crosby, C.J., Frank, E., Arrowsmith, J R., Nandigam, V., Kim, H.S., Conner, J., Memon, A., Baru, C., Alex, N., Enabling Access to High-Resolution LiDAR Topography Through Cyberinfrastructure-Based Data Distribution and Processing, Presented at *Cyberinfrastructure for the Geosciences Workshop*, Moscow, Russia, June 25-26, 2007 [INVITED]
- Crosby, C.J., Frank, E., Arrowsmith, J R., Nandigam, V., Kim, H.S., Conner, J., Memon, A., Baru, C., Alex, N., The GEON LiDAR Workflow as a Distribution Pathway for Community LiDAR Topography Datasets, *Geoinformatics 2007*, San Diego, CA, May 17-18, 2007.
- Crosby, C.J., Arrowsmith, J R., Frank, E., Nandigam, V., Kim, H.S., Conner, J., Memon, A., Baru, C., Enabling Access to High-Resolution LiDAR Topography through Cyberinfrastructure-Based Data Distribution and Processing, The Annual Meeting of the American Association of Geographers, Abstract of 103rd Annual Meeting, San Francisco, CA, 2007.
- Crosby, C.J., Arrowsmith, J R., Frank, E., Nandigam, V., Kim, H.S., Conner, J., Memon, A., Alex, N., Baru, C., The GEON LiDAR Workflow as a Distribution Pathway for Forthcoming GeoEarthScope LiDAR Datasets, 2007 Earthscope Annual Meeting, Monterey, CA.
- Arrowsmith, J R. and Crosby, C.J., GeoEarthscope and related topographic LiDAR datasets in the classroom: lessons about geomorphology, digital elevation models, and cyberinfrastructure, 2007 Earthscope Annual Meeting, Monterey, CA.
- Crosby, C.J., Arrowsmith, J R., Frank, E., Nandigam, V., Kim, H.S., Conner, J., Memon, A., Baru, C., Enhanced Access to High-Resolution LiDAR Topography through Cyberinfrastructure- Based Data Distribution and Processing, *Eos Trans. AGU, 87(52), Fall Meet. Suppl.*, Abstract IN41C-04, 2006.
- Kim, H., Arrowsmith, J R., Crosby, C.J., Jaeger-Frank, E., Nandigam, V., Memon, A., Conner, J., Badden, S.B., Baru, C., An Efficient Implementation of a Local Binning Algorithm for Digital Elevation Model Generation of LiDAR/ALSM Dataset, *Eos Trans. AGU, 87(52), Fall Meet. Suppl.*, Abstract G53C-0921, 2006.

- Arrowsmith, J R., Campbell, B., Crosby, C., Raleigh, D., Tectonic geomorphology and earthquake geology of the 1857 reach of the San Andreas Fault: a new look from Airborne Laser Swath Mapping, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract G53C-0916, 2006.
- Crosby, C.J., Arrowsmith, J.R., Baru, C., Meertens, C., 2006, A National Framework For Community LiDAR Datasets, Geological Society of America *Abstracts with Programs*, Vol. 38, No. 7, p. 550
- Crosby, C.J., Arrowsmith, J R., Conner, J., Frank, E., Memon, A., Nandigam, V., Wurman, G., Baru, C., A geoinformatics-based approach to the distribution and processing of integrated LiDAR and imagery data to enhance 3D earth systems research, Presented at the Geological Society of America Penrose Conference: "Unlocking 3D Earth Systems — Harnessing New Digital Technologies to Revolutionize Multi-Scale Geologic Models", Durham, UK, September, 2006.
- Crosby, C.J., Arrowsmith, J R., Frank, E., Nandigam, V., Kim, H.S., Conner, J., Memon, A., Baru, C., An Internet-based Tool for Accessing and Processing the Southern San Andreas (B4) LiDAR / ALSM Dataset, Southern California Earthquake Center Annual Meeting, Proceedings and Abstracts, v. 16, Palm Springs, CA, September, 2006.
- Crosby, C.J., Conner, J., Frank, E., Arrowsmith, J R., Memon, A., Nandigam, V., Wurman, G., Baru, C., Community Services for Serving LiDAR Data, Presented at the *International Workshop of Cyberinfrastructure for Geosciences (IWCG2006)*, Beijing, China, July 21-23, 2006. [INVITED]
- Crosby, C.J., Conner, J., Frank, E., Arrowsmith, J R., Memon, A., Nandigam, V., Wurman, G., Baru, C., The GEON LiDAR Workflow: An Internet-Based Tool for the Distribution and Processing of LiDAR Point Cloud Data, *Geoinformatics 2006*, Reston, VA May 11, 2006.
- Crosby, C.J. and Arrowsmith, J R., Utilization of LiDAR / ALSM Point Cloud Data for Earthquake Geology and Tectonic Geomorphic Mapping, Analysis, and Visualization, Presented at the 100th Anniversary Earthquake Conference, San Francisco, CA April 18-21, 2006.
- Arrowsmith, J R. and Crosby, C.J., New Looks at Active Faults: Tectonic Geomorphology using Airborne Laser Swath Mapping (ALSM), Presented at the 100th Anniversary Earthquake Conference, San Francisco, CA April 18-21, 2006.
- Crosby, C.J., Conner, J., Frank, E., Arrowsmith, J R., Memon, A., Nandigam, V., Wurman, G., Baru, C., The GEON LiDAR Workflow: An Internet-Based Tool for the Distribution and Processing of LiDAR Point Cloud Data, *2006 UNAVCO Science Workshop*, Denver, CO.
- Crosby, C.J., Conner, J., Frank, E., Arrowsmith, J R., Memon, A., Nandigam, V., Wurman, G., Baru, C., A Geoinformatics Approach to LiDAR / ALSM Data Distribution, Interpolation, and Analysis, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract H31E-1349, 2005.
- Arrowsmith, J R., Crosby, C.J., Korjenkov, A.M., Mamyrov, E., Povolotskaya, I.E., Surface rupture of the 1911 Kebin (Chon-Kemin) earthquake, Northern Tien Shan, Kyrgyzstan, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract T51F-05, 2005. [presenting author]
- Crosby, C.J., Conner, J., Frank, E., Arrowsmith, J R., Memon, A., Nandigam, V., Wurman, G., Baru, C., A Geoinformatics Approach to LiDAR / ALSM Data Distribution, Interpolation and Analysis, Southern California Earthquake Center Annual Meeting, Proceedings and Abstracts, v. 15, Palm Springs, CA, September, 2005.
- Crosby, C.J., Arrowsmith, J R., Conner, J., Wurman, G., LiDAR Data Distribution, Interpolation and Analysis on the GEON Grid – Beyond Proof of Concept, GEON Annual Meeting, San Diego, CA, 2005.
- Crosby, C. J., Arrowsmith, J R., Oldow, J. S., Prentice, C. S., Exploiting LiDAR for Regional Morphologic Correlation and Dating of Wave-cut and Fault-Controlled Landforms, *Eos Trans. AGU*, 85 (47), Fall Meet Suppl., Abstract G13B-0810, 2004.
- Crosby, C.J., Arrowsmith, J.R., LiDAR Data Distribution, Interpolation and Analysis on the GEON Grid – A Conceptual Framework, *Geological Society of America Annual meeting*, Paper No. 60-6, 2004.
- Arrowsmith, J R., Crosby, C. J., Korjenkov, A. M., Mamyrov, E., Povolotskaya, I. E., Surface rupture along the Chon Aksu and Aksu (eastern) segments of the 1911 Kebin (Chon-Kemin) earthquake, Tien Shan, Kyrgyzstan, *Eos Trans. AGU*, 85 (47), Fall Meet. Suppl., Abstract T14C-02, 2004.
- Toké, N. A., Arrowsmith, J R., Crosby, C. J., Young, J. J., Paleoseismology and Tectonic Geomorphology: Results From the Parkfield, CA Segment of the San Andreas Fault, *Eos Trans. AGU*, 85 (47), Fall Meet. Suppl., Abstract T13A-1336, 2004.

- Crosby, C.J., Arrowsmith, J.A., Computational challenges of LiDAR data processing and analysis – A GEON solution, Southern California Earthquake Center Annual Meeting, Proceedings and Abstracts, v. 14, Palm Springs, CA, September, 2004.
- Toké, N. A., Arrowsmith, J R., Crosby, C. J., Young, J. J., Preliminary paleoseismology results from the Parkfield, CA Segment of the San Andreas Fault, Southern California Earthquake Center Annual Meeting, Proceedings and Abstracts, v. 14, Palm Springs, CA, September, 2004
- Prentice, C.S., Crosby, C.J., Harding, D.J., Haugerud, R.A., Merritts, D.J., Gardner, T., Koehler, R.D., and Baldwin, J.N., 2003, Northern California LIDAR Data: A Tool for Mapping the San Andreas Fault and Pleistocene Marine Terraces in Heavily Vegetated Terrain, *Eos Trans. AGU*, 84 (46), Fall Meet. Suppl., Abstract G12A-06, 2003.
- Crosby, C.J., Prentice, C.S., Weber, J., Ragona, D., Paleoseismic evidence for Holocene Faulting, Central Range Fault, South American-Caribbean Plate Boundary, *Seismological Society of America Annual Meeting*, 2003.
- Stenner, H.D., Crosby, C.J., Dawson, T.E., Amoroso, L., Pearthree, P.A., Lund, W.R., Evidence for variable slip from the last three surface-rupturing earthquakes along the Central Hurricane Fault, Arizona, *Seismological Society of America Annual Meeting*, 2003.
- Fenton, C.H., Prentice, C.S., Benton, J., Crosby, C.J., Sickler, R.R., Stephens, T.A., 2002, Paleoseismic evidence for prehistoric earthquakes on the northern Maacama fault, Willits, CA, *Eos Trans. AGU*, 83 (47), Fall Meet. Suppl., Abstract S11B-1143, 2002.
- Prentice, C.S., Mann, P., Weber, J., Peña, L.R., and Crosby, C., 2002, Paleoseismology in the Caribbean: A review of studies in Hispaniola, Puerto Rico and Trinidad: EOS, Transactions of the American Geophysical Union, v. 83.
- Crosby, C.J., Prentice, C.S., Weber, J., and Hengesh, J.V., 2001, Paleoseismic and geomorphic evidence for Quaternary fault slip on the Central Range and Los Bajos faults, South American-Caribbean plate boundary, Trinidad: Ten Years of Paleoseismology in the ILP: Progress and Prospects, 17-21 December, 2001, Kaikoura, New Zealand, Programme and Abstracts. Institute of Geological and Nuclear Sciences Information Series 50, p. 50-51.
- Prentice, C.S., Langridge, R., Baldwin, J.N., Dawson, T., Merritts, D.J., and Crosby, C.J., 2001, Paleoseismic and Quaternary tectonic studies of the San Andreas Fault between Shelter Cove and Fort Ross, Northern California, USA: Ten Years of Paleoseismology in the ILP: Progress and Prospects, 17-21 December, 2001, Kaikoura, New Zealand, Programme and Abstracts. *Institute of Geological and Nuclear Sciences Information Series* 50, p. 52-53.
- Prentice, C.S., Weber, J., and Crosby, C.J., 2001, Paleoseismic and Geomorphic Evidence for Quaternary Fault Slip on the Central Range Fault, South American-Caribbean Plate Boundary, Trinidad [abs]: EOS, Transactions of the American Geophysical Union, v. 82, p. F928.
- Crosby, C.J., 2000, Reassessment of the 1906 earthquake and paleoseismology of the San Andreas fault, Doda Ranch, northern California: Thirteenth Keck Research Symposium in Geology, Proceedings, Whitman College, Walla Walla, WA, p. 136-139.

### SHORT COURSE & SESSION ORGANIZATION

*High-Resolution Topographic Data Processing, Analysis, and Visualization: Emerging Techniques and Applications*; co-organizer with Ramon Arrowsmith, ASU and Michael Oskin, UC Davis; 2011 AGU Meeting session.

*New Constraints on Active Fault Zones from Integration of Laser Scanning, Satellite Interferometry and other Earth Imaging Methods*; co-organizer with Kenneth McCaffrey Univ Durham, UK and Ioannis Papanikolaou Agri Univ, Athens, Greece; 2011 AGU Meeting session.

*Imaging and Analyzing Southern California's Active Faults with High-Resolution Lidar Topography*. Co-organizer with Michael Oskin, UC Davis, and Ramon Arrowsmith, Arizona State University. Sponsored by Southern California Earthquake Center, OpenTopography and Keck CAVES at UC Davis. 2011.

*Cyberinfrastructure Summer Institute for Geoscientists* at San Diego Supercomputer Center; co-organizer with Chaitan Baru, 2009-2011.

*Using EarthScope and B4 LiDAR data to analyze Southern California's active faults.* Co-organizer with Ramon Arrowsmith, Arizona State University. Sponsored by the Southern California Earthquake Center, OpenTopography and UNAVCO. 2009.

*Introduction to the acquisition, visualization, and interpretation of airborne LiDAR-derived digital elevation models;* Co-organizer with Ian Madin, DOGMAI; Ralph Hagerud, USGS; Michael Oskin, UC Davis. Geological Society of America Annual Meeting, 2009.

*Processing and Analysis of GeoEarthScope and Other Community LiDAR Topography Datasets;* co-organizer with Ramon Arrowsmith, Arizona State University; David Phillips, UNAVCO. 2008 UNAVCO Short Course Series.

*GeoEarthScope Airborne LiDAR Data Holding/Ordering/Acquisitions;* co-organizer. Special Interest Group, 2008 UNAVCO Science Workshop, Denver, Colorado. March 13, 2008.

*Processing and analysis of GeoEarthScope and other community LiDAR topography datasets;* co-organizer with David Phillips, UNAVCO; Ramon Arrowsmith, Arizona State University. Geological Society of America Annual Meeting, October 2007.

Invited Instructor: *Cyberinfrastructure Summer Institute for Geoscientists* at San Diego Supercomputer Center, August 13-17, 2007. Presented: "The GEON LiDAR Workflow: Cyberinfrastructure-Based Data Distribution and Processing".

Co-Organizer: "LiDAR Data: Management, Processing, and Access" Special Interest Group, 2006 UNAVCO Science Workshop, Denver, Colorado. March 14, 2006.

## **SERVICE**

Peer Review: 2007, 2008, 2011: *Geosphere*; 2011: *Geological Society of America Special Paper*

## **PROPOSALS (funded)**

Co-author: "Science Data Systems for Satellite and Airborne LiDAR Data". PI Charles Meertens, SDSC Co-I Chaitan Baru. Submitted to NASA ROSES ACCESS; funded 2010-2012.

Lead author: "Facility Support: OpenTopography - A National Hub for High Resolution Topographic Data, Tools, and Knowledge". PIs Chaitan Baru (SDSC) and Ramon Arrowsmith (ASU). Submitted to NSF EAR IF; funded 2009-2012.

Co-author: "GeoEarthScope LIDAR Project - LiDAR point cloud data processing and delivery workflow" PIs: J Ramon Arrowsmith and Chaitan Baru. Submitted as subcontract to GeoEarthScope from UNAVCO. Funded for 2007-2009.

Lead author: "Application of LiDAR data to constraining a late Pleistocene slip rate and vertical deformation of the Northern San Andreas Fault, Fort Ross to Mendocino, California: Collaborative research between Arizona State University and the U.S. Geological Survey." PI: J Ramon Arrowsmith. Submitted to the National Earthquake Hazard Reduction Program (NEHRP). Successfully funded for FY06.