

Erickson - Selected Presentations and Publications

2009

- **Erickson, Tyler A.** "Using KML to Visualize 4-D Atmospheric Carbon Monitoring Data." Google Tech Talk, Google - San Francisco, December 14, 2009.
- **Erickson, Tyler A.** "Using KML to Visualize 4-D Atmospheric Carbon Monitoring Data." Eos Trans. AGU 90(52), Fall Meet. Suppl. Abstract IN43A-1134 (2009).
- Petrzela, Jennifer L., **Tyler A. Erickson**, and Mark W. Williams. "Three-dimensional quantification of meltwater flow through a snowpack using a snow guillotine." Eos Trans. AGU 90(52), Fall Meet. Suppl. Abstract C31D-0463 (2009).
- **Erickson, Tyler A.** "Building Open Source Geospatial Data Systems to Manage Spatio-Temporal Data." Talk presented at the ASPRS/MAPPS 2009 Specialty Conference, San Antonio, Texas, November 17, 2009.
- **Erickson, Tyler A.** "A data system for visualizing 4-D atmospheric CO2 models and data." Talk presented at the Free and Open Source Software for Geospatial 2009, Sydney, Australia, October 22, 2009. ([PDF](#))
- French, Nancy H., **Tyler A. Erickson**, and Donald McKensie. "The Wildland Fire Emissions Information System: Providing information for carbon cycle studies with open source geospatial tools." Poster presented at the AmericaView Fall Technical Meeting, Sioux Falls, South Dakota, USA, October 6, 2009. ([PDF](#))
- **Erickson, Tyler A.** and Ronald Kemker. "pylibkml - a python wrapper for the libkml library," 2009. <http://code.google.com/p/pylibkml/>.
- **Erickson, Tyler A.** "North American Carbon KML." Talk presented at the GoogleEarthDay: Conference on Recent Applications of Google Earth by Individuals in Ann Arbor, Ann Arbor, Michigan, 4, 2009.
- French, Nancy H., **Tyler A. Erickson**, and Donald McKensie. "The Wildland Fire Emissions Information System: Providing information for carbon cycle studies with open source geospatial tools." Poster presented at the 2009 NACP All-Investigators Meeting, San Diego, California, USA, February 17, 2009.

2008

- **Erickson, Tyler A.**, Brian Thelen, and Ben Koziol. "Using Geostatistical Inverse Modeling to Address Uncertainty in Sensor Data Fusion." Eos Transactions AGU 89, no. 53 (December 17, 2008): Fall Meeting Supplement, Abstract IN33B-1171. ([PDF](#))
- French, Nancy H., **Tyler A. Erickson**, and Donald McKensie. "The Wildland Fire Emissions Information System: Providing information for carbon cycle studies with open source geospatial tools." Eos Transactions AGU 89, no. 53 (December 17, 2008): Fall Meeting Supplement, Abstract IN31C-1149. ([PDF](#))
- Yue Li, and **Tyler A. Erickson**. "Application of Spatial Visualization for Probabilistic Hurricanes Risk Assessment to Build Environment." In Proceedings of the 2008 Winter Simulation Conference, 2008. ([PDF](#))
- **Erickson, Tyler A.**, and Brian Thelen. "Incorporating Optical Sensor Models into Remote Sensing Analyses to Improve Accuracy." Talk presented at the The 17th William T. Pecora Memorial Remote Sensing Symposium, Denver, Colorado, November 20, 2008. ([PDF](#))
- **Erickson, Tyler A.** "Geospatial Information Systems for Web Distribution of Spatio-Temporal Data." Poster presented at the Scientific Applications with Google Earth Conference, University of Michigan, October 22, 2008. ([PDF](#))
- **Erickson, Tyler A.** "Innovative Sources and Distribution Methods for Geospatial Data." Talk presented at the ASPRS-EGLR Autumn Meeting, Dundee, Michigan, October 17, 2008. ([PDF](#))
- **Erickson, Tyler A.**, and Brian Thelen. "A Geostatistical Inverse Modeling Approach for Producing Earth Science Estimates from Multiple Remotely Sensed Datasets." In 2008 IEEE International Geoscience & Remote Sensing Symposium proceedings. Boston, Massachusetts, USA, 2008. ([PDF](#))
- **Erickson, Tyler A.**, and Colin Brooks. "À la carte Geospatial: Integrating Proprietary and Open-Source Software to Create Server-Based Geospatial Data Management Systems." Talk presented at the IMAGIN Annual Conference and Expo, GIS: Strengthening our Economic Future, Dearborn, Michigan, May 4, 2008.
- **Erickson, Tyler A.** "Water Resource Characterization and Remote Sensing Data Analysis using Geostatistical Techniques." Talk (INVITED) presented at the Michigan Technological University Environmental Engineering Graduate Seminar, Houghton, Michigan, March 31, 2008.
- **Erickson, Tyler A.** "Modern Methods for Web Distribution of Geographic Datasets." Talk (INVITED) presented at the Michigan Technological University Remote Sensing Institute Seminar Series, Houghton, Michigan, March 31, 2008.
- **Erickson, Tyler A.** "Software Research Needs: Geospatial and Decision Support Tools/Models: Applying Geospatial Decision Support Tools to Assess Water Quality and Human Health Risk in the Great Lakes Region." Talk (INVITED) presented at the Graham Environmental Sustainability Institute Conference on Water, Health, and the Environment: Setting the Research Agenda, Ann Arbor, Michigan, March 26, 2008.

2007

- **Erickson, T. A.** 2007. MichiganView Consortium: Promoting Remote Sensing in the Great Lakes Region. [Great Lakes Regional Data Exchange 2007 and CRSS/ASPRS 2007 Specialty Conference](#), October 29, Ottawa, Ontario, Canada.
- **Erickson, T.A.** and P. Gienke. 2007. *What's going on out there? Using GeoServer for management of Spatio-Temporal Environmental Data.* Presented at [2007 Free and Open Source Software for Geospatial \(FOSS4G\) Conference](#), Sept 24-27, 2007, Victoria, British Columbia, Canada.
- Brooks, C., R. Schuchman, E. Keefauver, B. Koziol, **T. Erickson**, C. Ide. 2007. The Great Lakes Environmental and Molecular Sciences

(GLEAMS) Center: Enhancing Community Decision Making through Geospatial Decision Support System (DSS) Tools. Michigan Environmental Health Association (MEHA) 63rd Annual Education Conference, Kalamazoo, MI.

- **Erickson, T.A.** and A.M. Michalak. 2007. Application of Geostatistical Inverse Modeling to Satellite Remote Sensing Data. Presented at 2007 Inverse Problem Symposium, Michigan State University, June 12, East Lansing, MI.
- **Erickson, T.A.** 2007. MichiganView Program Overview. Presented at [IMAGIN's 2007 Annual Conference, "Geography on the Move: Affecting Decisions"](#), May 7, Kalamazoo, MI.

2006

- Bannick, R. R., and **T. A. Erickson**. 2006. Geomapping Drive-Time Based Market Areas for DoD TRICARE Beneficiaries. Presented at the 2006 ESRI Health GIS Conference, October 23-26, Denver, Colorado.
- **Erickson, T. A.**, and A. M. Michalak. 2006. Merging of Variable-resolution Imagery Using Geostatistics and Sensor PSFs. in American Society for Photogrammetry and Remote Sensing, Reno, Nevada, U.S.A.
- **Erickson, T. A.**, and A. M. Michalak. 2006. What Does a Pixel Represent? Accounting for the Non-Uniform Spatial Information Content of Remotely-Sensed Data Used for Data Assimilation. *Eos Trans., AGU 87(52): Fall Meet. Suppl. Abstract 31A-0869.*

2005 and earlier

- **Erickson, T. A.**, M. W. Williams, and A. Winstral. 2005. Persistence of topographic controls on the spatial distribution of snow in rugged mountain terrain, Colorado, USA. *Water Resources Research* 41:doi:10.1029/2003WR002973.
- **Erickson, T. A.**, S. Savage and R. Shuchman. 2005. Ecological and Human Health Risk Assessment for the Kalamazoo River Superfund Site Using a Web-based GIS Talk presented at the Geocomputation 2005 International Conference, August 1, 2005.
- Manty, D., M. Hodges, S. Balla, **T. A. Erickson**, C. Brooks, S. Bihn, and B. Levin. Bringing High-tech GIS Tools to Community Decision-Making. Presented July 13, 2005 at the 2005 USEPA Community Involvement Conference, Buffalo, New York.
- Brooks, C., **T. A. Erickson**, R. Shuchman, S. Savage, M. O'Haver, C. Ide, and J. Means. 2005. Lake St. Clair Web-based Geospatial Information Management System for Watershed Data. Presented at the Lake Michigan: State of the Lake - 4th Biennial Conference, Green Bay, Wisconsin.
- **Erickson, T. A.** 2004. Working with Spatially Correlated Measurements in the Modeling of Environmental Properties. Presented April 2, 2004 at the Cryospheric and Polar Processes Division Seminar, National Snow and Ice Data Center, Boulder, Colorado. (INVITED)
- **Erickson, T. A.** 2004. Development and Application of Geostatistical Methods to Modeling Spatial Variation in Snowpack Properties, Front Range, Colorado. Ph.D. dissertation submitted to the Department of Geography, University of Colorado, Boulder, Colorado.
- **Erickson, T. A.**, and M. W. Williams. 2003. The Soddie Lysimeter Array: Spatially-variable Snowmelt Data and Analyses. Presented at the International Workshop on Mountain Hydrology, Einsiedeln, Switzerland.
- **Erickson, T. A.**, and M. W. Williams. 2002. Snow Guillotine: visualization and statistics of meltwater flowpaths in a wet snowpack. Presented at the 2002 International Snow Science Workshop, Penticton, British Columbia, Canada.
- **Erickson, T. A.**, M. Williams, and R. Sommerfeld. 2000. Spatial Statistics of Snowmelt. Pages 1147-1152 in L. R. Bentley, J. F. Sykes, C. A. Brebbia, W. G. Gray, and G. F. Pinder, editors. XIII International Conference on Computational Methods in Water Resources. A.A. Balkema, Calgary, Alberta, Canada.
- **Erickson, T. A.** 2000. Contributions to best linear unbiased estimation. Engineer thesis submitted to the Department of Civil and Environmental Engineering. Stanford University, Stanford, California.