

JONATHAN W. CHIPMAN

*Director, Citrin Family GIS/Applied Spatial Analysis Laboratory
Department of Geography, Department of Earth Sciences, and
Quantitative Social Sciences Program
Dartmouth College*

CONTACT

Department of Geography, 6017 Fairchild, Hanover NH 03755 USA
Tel: 603-646-3321
Fax: 603-646-1601
Email: jonathan.chipman@dartmouth.edu
Web: geography.dartmouth.edu/

EDUCATION

- Ph.D. (Environmental Monitoring) University of Wisconsin-Madison, 2001
*Dissertation: Topographic Mapping of Forested Areas in the Western Great Lakes Region Using
Spaceborne Synthetic Aperture Radar Interferometry*
- M.S. (Environmental Monitoring) University of Wisconsin-Madison, 1996
*Thesis: Analysis of Spaceborne Synthetic Aperture Radar Images to Assist in Statewide Land
Cover Mapping and Long-Term Ecological Research*
- A.B. (Music), Dartmouth College, 1990

PROFESSIONAL INTERESTS

Remote sensing, geographic information systems, spatial analysis
Satellite-based monitoring of hydrology and lake water quality
Cartography and geovisualization
Facilitating the adoption of geospatial science and technology in the curriculum

EMPLOYMENT

- | | |
|--------------|---|
| 2007-present | Director, Citrin Family GIS/Applied Spatial Analysis Laboratory, Dartmouth College |
| 2004-2007 | Assistant Scientist, Environmental Remote Sensing Center, University of Wisconsin-Madison |
| 2001-2004 | Research Associate, Center for Limnology, University of Wisconsin-Madison |
| 1994-2001 | Project Assistant, Environmental Remote Sensing Center, University of Wisconsin-Madison |

TEACHING

Dartmouth College EARS 65/GEOG 51 & EARS 165 (Graduate level) : Remote Sensing
GEOG 54: Geovisualization
GEOG 59/EARS 77 & EARS 177 (Graduate level): Environmental Applications of GIS
GEOG 85: Advanced Reading in Geography
EARS 87: Special Projects
Co-instructor for EARS 45, 46, 47: Off campus program in Earth Sciences
-instructor for ENV5 40, 42, 84: Foreign study program in Environmental Studies

Contributions to other courses:

EARS 16: Hydrology and Water Resources
EARS 76: Contaminant Hydrogeology
GEOG 1: Introduction to Human Geography
GEOG 3: The Natural Environment
GEOG 33: Earth Surface Processes and Landforms
GEOG 35/EARS 71: River Processes and Watershed Science

University of Wisconsin IES 301: Introduction to Aerial Photographic Systems
IES 302: Introduction to Electro-Optical and Microwave Remote Sensing Systems

Recipient of the University of Wisconsin's Excellence in Teaching Award, 1999

Participant in the 2009 Active Learning Institute, Dartmouth Center for the Advancement of Learning

RESEARCH AWARDS AND GRANTS

Co-investigator, with PI Meredith Kelly. *Collaborative research: Assessing the response of tropical temperature to global forcings since the Last Glacial Maximum*. National Science Foundation – P2C2 Program, award . 9/1/2017 – 8/31/2020, \$376,997.

Co-investigator, with PI Margaret Karagas. *A prospective study of critical environmental exposures in formative early life that impact lifelong health in rural US children: the New Hampshire Birth Cohort Study*. National Institutes of Health (NIH) Epidemiology program, award UG3OD023275. 9/21/2016-8/31/2018 (initial commitment) with pending continuation through 8/31/2023; \$3,428,243 (initial commitment) and \$36,578,865(pending).

Co-investigator, with PI Jonathan Winter. *Expansion of Lyme Disease in the Northeast: Climate, Land Use, and Ticks*. Dartmouth College Neukom Institute CompX award, 2016-2017; \$24,721.

Co-investigator, with PI Xun Shi. *Maintaining Environmental Flows and Sustainable Water Use Strategies in a Rapidly Developing Watershed: Tarim Basin, China*. Porter Family Foundation, 2013-2017; \$50,000.

Co-investigator, with PI Dorothy Wallace. *Hydrological Determinants of Mosquito Borne Disease: A Benchmark Data Set for Modeling*. Dartmouth College Neukom Institute CompX award. \$10,000.

Co-investigator, with PI Xun Shi. *How Much Water Can We Give to Nature: The Water Resource Problem of Tarim River, Xinjiang, China*. Dartmouth College Rockefeller Faculty Research Grants. \$8,000 (completed).

Principal Investigator (2006-2007, University of Wisconsin) / Co-Investigator (2007-2011, Dartmouth). *Multisensor Spaceborne Monitoring of Large Lakes Worldwide: Assessment of Trends in Water Quantity and Quality*. NASA Terrestrial Hydrology Program; 2006-2011. \$527,930 (completed).

Principal Investigator. *Facilitating the Adoption of Geographic Information Systems and Spatial Analysis in the Curriculum*. 2008 Computing Technology Venture Fund award; Dartmouth College; 2008-2009; \$9868 (completed).

Co-Investigator (at University of Wisconsin, prior to move to Dartmouth), with PI Jonathan Patz. *Health Risks from Climate Variability and Change in the Upper Midwest: a Place-based Assessment of Climate-related Morbidity*. US EPA Science to Achieve Results; University of Wisconsin. 2005-2008; \$598,599 (completed).

Co-Investigator (at University of Wisconsin, prior to move to Dartmouth), with PI Stephen Carpenter. *Comparative Study of a Suite of Lakes in Wisconsin*. National Science Foundation Long-Term Ecological Research Program; University of Wisconsin; 2002-2008; \$6,720,000 (completed).

Principal Investigator. *LakeSat: Near Real-time Monitoring of Water Quality in Green Bay and Wisconsin's Lake Michigan Coastal Waters via Satellite Remote Sensing*. Wisconsin Sea Grant; University of Wisconsin; 2004-2007; \$319,155 (completed).

Principal Investigator on Subcontract. *Assessing the Performance of Various Proximal and Remote Sensing Platforms for Estimating Lake Trophic Status and Trends*. Subcontract from North American Lake Management Society (NALMS), funded by proposal to US EPA; 2005-2006; UW-Madison subtotal \$27,782 (completed).

PUBLICATIONS: BOOKS AND BOOK CHAPTERS

- Lillesand, T., R. Kiefer, and J. Chipman. 2015. *Remote Sensing and Image Interpretation*, 7th edition. John Wiley & Sons, NY. (Lead author for 7th edition and primary responsibility for 5 of 8 chapters).
- Hostert, P., F. Swayne, W. Cohen, and J. Chipman. 2010. "The Role of Remote Sensing in Long-Term Ecological Research Projects." In F. Müller, C. Baessler, H. Schubert, and S. Klotz (editors), *Long-Term Ecological Research: Between Theory and Application*, Springer, New York.
- Chipman, J., L. Olmanson, and A. Gitelson. 2009. *Remote sensing methods for lake management*. North American Lake Management Society, Madison, WI.
- Lillesand, T., R. Kiefer, and J. Chipman. 2008. *Remote Sensing and Image Interpretation*, 6th edition. John Wiley & Sons, NY.
- Chipman, J. 2006. "Remote Sensing." In J. Pfafflin and E. Ziegler, eds., *Encyclopedia of Environmental Science and Engineering*, 5nd edition. CRC Press, Boca Raton, FL.
- Benson, B., P. Hanson, J. Chipman, and C. Bowser. 2005. "Breaking the Data Barrier: Research Facilitation Through Data and Information Management." In J. Magnuson, T. Kratz and B. Benson, *Long Term Ecological Research of North Temperate Lakes: Dynamics of Lakes in the Landscape*. Oxford University Press, NY.

Lillesand, T., R. Kiefer, and J. Chipman. 2004. *Remote Sensing and Image Interpretation*, 5th edition. John Wiley & Sons, NY.

Chipman, J., R. Kiefer, and T. Lillesand. 2004. "Remote Sensing." In R. Dorf, *The Engineering Handbook*, 2nd edition. CRC Press, Boca Raton, FL.

Lillesand, T., J. Chipman, D. Nagel, H. Reese, M. Bobo, and R. Goldmann. 1998. *Upper Midwest Gap Analysis Program Image Processing Protocol*. US Geological Survey, Onalaska, WI.

Cartographic design of maps for Dartmouth College faculty books, including works published, in press, or in preparation, by Douglas Irwin, Rashauna Johnson, Chris Sneddon, Robert Baum, Jennifer Fluri, Nadhav Samin, Darryl Press, DG Webster, and James Igoe.

PUBLICATIONS: PEER-REVIEWED JOURNAL ARTICLES

Kopec, B., X. Feng, E.S. Posmentier, J.W. Chipman, and R.A. Virginia. In review. Extracting environmental information from lake water isotopic ratios. *Limnology and Oceanography* (in review).

Li, B., Y. Chen, J.W. Chipman, and X. Shi. In review. Why does the runoff in Hotan river show a slight decreased trend in northwestern China? *Atmospheric Sciences Letters* (in review).

Heindel, R.C., J.W. Chipman, J.T. Dietrich, and R.A. Virginia. 2017 (in press). Quantifying rates of soil deflation with Structure-from-Motion photogrammetry in West Greenland. *Arctic, Antarctic, and Alpine Research*, special issue on "Environmental Change and Impacts in the Kangerlussuaq Area, West Greenland" (in press).

Schild, K.M., R.L. Hawley, J.W. Chipman, and D.I. Benn. 2017. Quantifying suspended sediment concentration in subglacial sediment plumes discharging from two Svalbard tidewater glaciers using Landsat-8 and in situ measurements. *International Journal of Remote Sensing* 38(23): 6865-6881. doi: 10.1080/01431161.2017.1365388

Chipman, J., X. Shi, F. Magilligan, Y. Chen, and B. Li. 2016. Impacts of land cover change and water management practices on the Tarim and Konqi river systems, Xinjiang, China. *Journal of Applied Remote Sensing*, 0001;10(4):046020. doi:10.1117/1.JRS.10.046020.

Wallace, D., O. Prosper, J. Savos, A. Dunham, J. Chipman, X. Shi, B. Ndenga, and A. Githeko. 2016. Modeling the response of *Anopheles gambiae* populations in the Kenya Highlands to a rise in mean annual temperature. *Journal of Medical Entomology*, doi: 10.1093/jme/tjw174.

Magilligan, F.J., B. Graber, K. H. Nislow, J. Chipman, C. S. Sneddon, and C. Fox. 2016. River restoration by dam removal: enhancing connectivity at watershed scales. *Elementa: Science of the Anthropocene*, 4: 000108. doi: 10.12952/journal.elementa.000108.

Heindel, R., J. Chipman, and R. Virginia. 2015. The spatial distribution and ecological impacts of aeolian soil erosion in Kangerlussuaq, West Greenland. *Annals of the Association of American Geographers*, 105(5): 875-890. doi: 10.1080/00045608.2015.1059176.

- Wallace, D., B. Southworth, X. Shi, J. Chipman, and A. Githeko. 2014. A comparison of five malaria transmission models: benchmark tests and implications for disease control. *Malaria Journal*, 13:268. doi:10.1186/1475-2875-13-268.
- Morriss, B., R. Hawley, J. Chipman, L. Andrews, G. Catania, M. Hoffman, P. Lüthi, and T. Neumann. 2013. A ten-year record of supraglacial lake evolution and rapid drainage in West Greenland using an automated processing algorithm for multispectral imagery. *The Cryosphere*, 7: 1869-1877. doi: 10.5194/tc-7-1869-2013.
- Caller T., J. Chipman, N. Field, and E. Stommel. 2013. A spatial analysis of amyotrophic lateral sclerosis in northern New England, USA, 1997-2009. *Muscle and Nerve*, 48(2):235-41. doi: 10.1002/mus.23761.
- Chipman, J., R. Wright, M. Ellis, and S. Holloway. 2012. Mapping the evolution of racially mixed and segregated neighborhoods in Chicago. *Journal of Maps*, 15 Nov 2012 special issue on Innovative Mapping in Spatial Demography, DOI: 10.1080/17445647.2012.740431.
- Caller T., N. Field, J. Chipman, X. Shi, B. Harris, and E. Stommel. 2012. Spatial Clustering of Amyotrophic Lateral Sclerosis and the Potential Role of BMAA. *Amyotrophic Lateral Sclerosis*, 13(1): 25-32.
- San Gil, I. and 36 other authors. 2009. The Long-Term Ecological Research community metadata standardisation project. *Int. J. Metadata Semantics and Ontologies*, 4: 141–153.
- Chipman, J. and T. Lillesand. 2007. Satellite-based assessment of the dynamics of new lakes in southern Egypt. *International Journal of Remote Sensing*, 28(19): 4365-4379.
- Carpenter, S., B. Benson, R. Biggs, J. Chipman, J. Foley, S. Golding, R. Hammer, P. Hanson, P. Johnson, A. Kamarainen, T. Kratz, R. Lathrop, K. McMahon, B. Provencher, J. Rusak, C. Solomon, E. Stanley, M. Turner, J. Vander Zanden, C. Wu, and H. Yuan. 2007. Understanding regional change: a comparison of two lake districts. *BioScience*, 57(4): 323-335.
- Dash, J., A. Mathur, G. Foody, P. Curran, J. Chipman, and T. Lillesand. 2007. Land cover classification using multi-temporal MERIS vegetation indices. *International Journal of Remote Sensing*, 28(5-6): 1137-1159.
- Peckham, S., J. Chipman, T. Lillesand, and S. Dodson. 2006. Alternate stable states and the shape of the lake trophic distribution. *Hydrobiologia*, 571:401-407.
- Chipman, J., T. Lillesand, J. Schmaltz, J. Leale, and M. Nordheim. 2004. Mapping lake water clarity with Landsat images in Wisconsin, USA. *Canadian Journal of Remote Sensing*, 30(1):1-7.
- Reese, H., T. Lillesand, D. Nagel, J. Stewart, R. Goldmann, T. Simmons, J. Chipman and P. Tessar. 2002. Statewide land cover derived from multiseasonal Landsat TM data: a retrospective of the WISCLAND project. *Remote Sensing of Environment*, 82(2-3): 224-237.
- Means, J., P. Hopkins, J. Jensen, S. Schill, J. Chipman, R. Ramsey, and D. Stow. 2001. ARC partnerships: industry and academia explore remote sensing applications. *Journal of Forestry* 99: 4-12.
- Chipman, J., T. Lillesand, J. Gage, and S. Radcliffe. 2000. Spaceborne imaging radar in support of forest

resources management. *Photogrammetric Engineering and Remote Sensing*, 66(11): 1357-1366.

WORKSHOPS AND PRESENTATIONS AT PROFESSIONAL CONFERENCES

- Heindel, R., J. Chipman, J. Dietrich, and R. Virginia. 2017. 3D photogrammetric modeling of aeolian soil erosion in west Greenland. Annual meeting of the Association of American Geographers, 7 April 2017, Boston, MA.
- Chipman, J. and X. Shi. 2017. Characterizing landscape dynamics using satellite image time series in the Tarim Basin, Xinjiang. Annual meeting of the Association of American Geographers, 6 April 2017, Boston, MA.
- Heindel, R., L. Culler, C. Urbanowicz, J. Chipman, and R. Virginia. 2016. The geomorphic and ecological impacts of soil deflation in West Greenland. Annual Meeting of the Geological Society of America, September 2016, Denver, CO.
- Chipman, J., F. Magilligan, X. Shi, C. Sneddon, J. Winter, Y. Chen, and B. Li. 2016. Land cover change and water management on the Tarim and Konqi river systems, Xinjiang, China. 33rd Annual Meeting of the International Geographical Congress, August 2016, Beijing, China.
- Heindel, R., L. Culler, J. Chipman, and R. Virginia. 2016. Soil response to aeolian disturbance in west Greenland. 46th International Arctic Workshop, April 2-3, 2016, Boulder, CO.
- Heindel, R., L. Culler, J. Chipman, and R. Virginia. 2015. Soil response to aeolian disturbance in west Greenland. Annual conference, American Geophysical Union, San Francisco, CA.
- Dominy, N., S. Ikram, G. Moritz, J. Christensen, P. Wheatley, and J. Chipman. 2015. Mummified baboons clarify ancient Red Sea trade routes. Annual meeting of the American Association of Physical Anthropologists, March 28, 2015, St Louis, MO.
- Wallace, D., O. Prosper, X. Shi, J. Chipman, J. Savos, E. Wilkins, H. Cleaves, A. Dunham, A. Githeko, and B. Ndenga. 2015. The impact of temperature on mosquito larval dynamics and habitat productivity, with implications for mosquito borne disease transmission. Impact of Environmental Changes on Infectious Disease (IECID), March 24, 2015, Melia, Sitges, Spain.
- Chipman, J., X. Shi, F. Magilligan, Y. Chen, C. Sneddon, and D. Lawson. 2014. Multisensor spaceborne monitoring of landscape change in the Tarim River watershed, Xinjiang, China. Annual meeting of the Association of American Geographers, April 2014, Tampa, FL.
- Chipman, J. 2014. High-resolution earth observation satellites in the optical spectrum. Digital Domains: A Conference on Remote Sensing of Past Human Landscapes, 20-22 March 2014, Hanover, NH.
- Moore, J., H. Hallock, J. Chipman, and M. Sharma. 2013. Iridium and osmium fluences across the K-Pg boundary indicate a small impactor. Annual conference on Lunar and Planetary Science, 22 March 2013, The Woodlands, TX.
- Chipman, J. W. 2011. Land cover variability across spatial and temporal scales: implications for wild ungulate populations in Tanzania. Annual conference, American Society for Photogrammetry and Remote Sensing (ASPRS), 4 May 2011, Milwaukee, WI.
- Meyer, E., E. Osterberg, W. Dade, L. Sonder, C. Renshaw, M. Kelly, R. Hawley, J. Chipman, J. Mikucki, E. Posmentier, and J. Moore. 2011. Dartmouth College Earth Sciences Mobile Field Program. Annual conference, American Geophysical Union, San Francisco, CA.
- Kelson, K., C. Amos, D. Simpson, J. Baldwin, R. Rose, M. Ticci, J. Kelson, E. Salesky, and J. Chipman. 2010. Structural and Geomorphic Control on Landscape Evolution by the Kern Canyon Fault, Southern Sierra Nevada, California. Annual conference, American Geophysical Union, San Francisco, CA.
- Chipman, J. W. and M. Durand. 2010. Remote sensing of the Great Lakes. Workshop on NASA's Role in Great Lakes Research, sponsored by NASA Physical Oceanography Program, 12 April 2010, NASA Glenn Research Center, Cleveland, OH.

- Chipman, J. W. 2009. Remote sensing for lake management: fundamental concepts. Annual symposium, North American Lake Management Society (NALMS), workshop on Remote Sensing Methods for Lake Assessment, 27 October 2009, Hartford CT.
- Chipman, J. W. 2009. Satellite remote sensing III: regional- to global-scale systems. Annual symposium, North American Lake Management Society (NALMS), workshop on Remote Sensing Methods for Lake Assessment, 27 October 2009, Hartford CT.
- Greb, S. R., Martin, A. A., and Chipman, J. W. 2009. Water clarity monitoring of Wisconsin lakes (USA) using Landsat satellites. 33rd International Symposium on Remote Sensing of Environment: Sustaining Millennium Development Goals, 4-8 May 2009, Stresa-Lago Maggiore, Italy.
- Muldoon, K. M., L. R. Godfrey, W. L. Jungers, and J. W. Chipman. 2009. Geographic patterning in subfossil primate community dynamics in Madagascar. Annual Meeting of the American Association of Physical Anthropologists, 31 March – 4 April 2009, Chicago.
- Chipman, J. W. 2008. Satellite monitoring of lake ecosystems. Annual Meeting, New England Region – American Society for Photogrammetry and Remote Sensing, 6 October 2008, Hanover, New Hampshire.
- Chipman, J. W. 2008. Mapping invasive reed canarygrass at the landscape scale with remote sensing. US-International Association for Landscape Ecology, 23rd annual Landscape Ecology Symposium, Madison, April 6-10.
- Chipman, J. W. 2007. Satellite monitoring of hydrologic transformations in southern Egypt. *Proceedings*, Annual Meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), 7-11 May 2007, Tampa, Florida.
- Chipman, J. W. 2007. Remote sensing for lake management: fundamental concepts. 20th Annual National Conference on Enhancing the States' Lake Management Programs, workshop on Satellite-Based Remote Sensing Methods for Lake Assessment, 24 April 2007, Chicago.
- Chipman, J. W. 2007. Satellite remote sensing III: regional- to global-scale systems. 20th Annual National Conference on Enhancing the States' Lake Management Programs, workshop on Satellite-Based Remote Sensing Methods for Lake Assessment, 24 April 2007, Chicago.
- Chipman, J. W. 2006. Monitoring large lakes using regional-scale satellite imagery from MODIS, MERIS, and other sensors. Annual symposium, North American Lake Management Society (NALMS), 8-10 Nov. 2006, Indianapolis. Indiana.
- Chipman, J. W. 2006. Remote sensing for lake management: fundamental concepts. Annual symposium, North American Lake Management Society (NALMS), workshop on Satellite-Based Remote Sensing Methods for Lake Assessment, 8-10 Nov. 2006, Indianapolis. Indiana.
- Chipman, J. W. 2006. Satellite remote sensing III: regional- to global-scale systems. Annual symposium, North American Lake Management Society (NALMS), workshop on Satellite-Based Remote Sensing Methods for Lake Assessment, 8-10 Nov. 2006, Indianapolis. Indiana.
- Marburg, A. E., M. Binder, S. R. Carpenter, J. Chipman, T. K. Kratz, T. Lillesand, and M. G. Turner. 2006. Relationship of riparian land-cover change and initial lake color clarity and conductivity in Northern Wisconsin USA. Annual Meeting. International Association of Landscape Ecologists, US chapter, March 28- April 1, San Diego.
- Sugden-Newbery, A. E., J. Chipman, M. Binder, M. Wegener, J. Riera, T. Lillesand, F. Scarpace, T. K. Kratz, M. G. Turner & S. R. Carpenter. 2005. Historical cause and effect: Are changes in lake chemistry drivers of or driven by changes in land-use? LTER student collaborative research symposium. Andrews Experimental Forest, Blue River, OR April 13 - 17. (Invited)
- Chipman, J. W. 2005. Multi-sensor satellite monitoring of lakes in the US midwest region. Annual symposium, North American Lake Management Society (NALMS), 9-11 Nov. 2005, Madison, Wisconsin.
- Chipman, J. W. and S.A. Batzli (presenter). 2005. LakeSat: satellite remote sensing of Green Bay and Lake Michigan. Joint Conference on Lake Michigan: State of the Lake, 2-3 Nov. 2005, Green Bay, Wisconsin.

- Chipman, J., T. Lillesand, S. Batzli, S. Peckham, and P. Wolter. 2005. Satellite monitoring of Wisconsin's nearshore Lake Michigan waters. *Proceedings*, Annual Meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), 7-11 March 2005, Baltimore.
- Lillesand, T., J. Chipman, N. Podger, P. Wolter, T. Olsen, and S. Batzli. 2005. Using Multi-scale and Multi-temporal Satellite Data to Assess Tornado Damage: An Update. Annual meeting of the American Society for Photogrammetry and Remote Sensing, 7-11 March 2005, Baltimore.
- Batzli, S., J. Chipman, J. Schmaltz, P. Howe, P. Weiler, and T. Lillesand. 2004. "Near Real-time Internet Delivery of Processed MODIS Imagery in Wisconsin." *Proceedings of the 2004 annual meeting of the American Society for Photogrammetry and Remote Sensing*, May 2004.
- Lillesand, T., J. Chipman, and S. Batzli. 2004. "Understanding the Big Picture of Lake Water Clarity via Multi-stage Remote Sensing." *Proceedings of the 2004 annual meeting of the American Society for Photogrammetry and Remote Sensing*, May 2004.
- Chipman, J. W. 2004. "Satellite-Based Monitoring of Lake Water Clarity, Chlorophyll, and Suspended Solids." 17th Annual National Conference on Enhancing the States' Lake Management Programs, 22 April 2004, Chicago.
- Chipman, J. W. 2003. "Remote Sensing of Water Quality in Green Bay and the Fox/Wolf Basin." Phosphorus Research Update workshop sponsored by University of Wisconsin Green Bay and University of Wisconsin Extension, 18 Nov. 2003, Green Bay, Wisconsin.
- Lillesand, T., J. Chipman, M. Binder, and M. Nordheim. 2003. Monitoring Lakescape changes through integration of satellite remote sensing of water clarity and airphoto interpretation of land use/land cover in the riparian zone. *Proceedings: North American Lake Management Society International Symposium*, Mashantucket, CT, abstract.
- Chipman, J. W. 2003. "Historical Trends in Land Use/Land Cover." Long-Term Ecological Research (LTER) Program All Scientists Meeting, 18-21 Sept. 2003, Seattle.
- Chipman, J. W. 2003. "Lake Water Quality Assessment – Satellites and Citizens." Wisconsin Land Information Association (WLIA) Workshop on Remote Sensing, 24 July 2003, Wisconsin Rapids, WI.
- Lillesand, T. M. and J. W. Chipman. 2003. "Overview of Remote Sensing: Basic Principles and Aerial Systems." Wisconsin Land Information Association (WLIA) Workshop on Remote Sensing, 24 July 2003, Wisconsin Rapids, WI.
- Lillesand, T. M. and J. W. Chipman. 2003. "Emerging Remote Sensing Technologies and Satellite Systems." Wisconsin Land Information Association (WLIA) Workshop on Remote Sensing, 24 July 2003, Wisconsin Rapids, WI.
- Chipman, J. W. 2003. "Long-Term Land Use Change in Two Wisconsin Lake Districts: Dynamics and Implications." US National Science Foundation (NSF)/European Union (EU) International Workshop on Long-Term Environmental Research, 30 June - 6 July 2003, Motz, France.
- Chipman, J. W., T. M. Lillesand, J. Schmaltz, J. Leale, K. Lewelling, R. Goldmann, and T. Olsen. 2002. "Satellite Remote Sensing of North Temperate Lakes at Multiple Spatial, Spectral, and Temporal Resolutions." *Proceedings*, Annual Meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), April 2002, Washington, DC.
- Lillesand, T., N. Podger, J. Chipman, R. Goldmann, K. Lewelling, and T. Olsen. 2002. "Assessing Tornado Damage Via Multi-Temporal Analysis of Landsat 7 ETM+ Data." *Proceedings*, Annual Meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), April 2002, Washington, DC.
- Chipman, J. W. 2002. "Regional Monitoring of Lakes from Space: The Wisconsin Satellite Lake Observatory Initiative." Annual symposium of the Wisconsin Land Information Association, March 2002, Green Bay, WI.
- Lillesand, T.M., N. Podger, J.W. Chipman, R. Goldmann, K. Lewelling, and T. Olsen. 2002. Using Landsat-7 data for assessing the damage due to the June 18, 2001 "Siren" tornado. Annual symposium of the Wisconsin Land Information Association, March 2002, Green Bay, WI.

- Lillesand, T.M., J.W. Chipman, and J. Leale. 2001. The Wisconsin Satellite Lake Observatory Initiative and the role of Landsat data in statewide lake transparency measurement. Proceedings: North American Lake Management Society Symposium (NALMS), 7-9 Nov. 2001, Madison, Wisconsin, abstract.
- Schmaltz, J., J.W. Chipman, and T.M. Lillesand. 2001. MODIS: A new data source for monitoring water quality trends in large lakes at regional scales. Proceedings: North American Lake Management Society Symposium (NALMS), 7-9 Nov. 2001, Madison, Wisconsin, abstract.
- Leale, J., J. Chipman, J. Schmaltz, T. Lillesand, T. Olsen, S.E. Knight, J.K. Panuska, K. Webster, J. Filbert, and J. Wudi. 2001. The Wisconsin Satellite Lake Observatory (SLOI), North American Lake Management Society Symposium (NALMS), 7-9 Nov. 2001, Madison, Wisconsin, abstract of poster.
- Chipman, J. W., T. M. Lillesand, J. Schmaltz, and J. Leale. 2001. "A Multi-Sensor Approach to Monitoring the Transparency of Wisconsin's Lakes." *Proceedings*, Workshop on Remote Sensing and Resource Management in Nearshore and Inland Waters, Alliance for Marine Remote Sensing, 22-24 October 2001, Wolfville, Nova Scotia, Canada.
- Schmaltz, J., J. W. Chipman, J. Leale, and T. M. Lillesand. 2001. "The Wisconsin Satellite Lake Observatory Initiative." *Poster presentation with abstract*, Workshop on Remote Sensing and Resource Management in Nearshore and Inland Waters, Alliance for Marine Remote Sensing, 22-24 October 2001, Wolfville, Nova Scotia, Canada.
- Chipman, J. W., T. Lillesand, F. Scarpace, and J. Gage. 2001. "Dependence of L-Band Interferometric Elevation Measurements on Forest Stand Structural Parameters." *Proceedings*, Annual Meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), April 2001, St. Louis, MO.
- Lillesand, T. M., J. Riera, J. Chipman, J. Gage, M. Janson, J. Panuska, and K. Webster. 2001. "Integrating Multi-Resolution Satellite Imagery Into A Satellite Lake Observatory." *Proceedings*, Annual Meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), April 2001, St. Louis, MO.
- Bauer, M., L. Olmanson, S. M. Kloiber, M. Schultze, P. Brezonik, J. Chipman, J. Riera, and T. Lillesand. 2001. "Assessment of Lake Water Clarity in the Upper Great Lakes Region." *Proceedings*, Annual Meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), April 2001, St. Louis, MO.
- Chipman, J. W., T. M. Lillesand, and F. L. Scarpace. 2000. "Assessing the Bias in Interferometric Radar Measurements of Elevation Acquired over a Forested Region." *Proceedings*, Annual Meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), 22-26 May 2000, Washington, DC.
- Chipman, J. W., T. M. Lillesand, P. R. McEnaney, and F. L. Scarpace. 2000. "Topographic Mapping in the Western Great Lakes Region using Repeat-Pass Synthetic Aperture Radar Interferometry." Poster presented at the Annual Meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), 22-26 May 2000, Washington, DC.
- Dahman, N., T. Krumbach, J. W. Chipman, M. Dudka, F. Scarpace, and J. Gage. 1999. "Geospatial Tools, Techniques, and Methods for the Near Future: Latest from the Environmental Remote Sensing Center, UW-Madison." Wisconsin Land Information Association (WLIA) Conference, 10 March 1999, Appleton, WI.
- Lillesand, T. M., J. D. Gage, and J. W. Chipman. "The Visiting Investigator Program (VIP) at the University of Wisconsin-Madison." Proceedings of the American Society for Photogrammetry and Remote Sensing (ASPRS) Conference, April 1998, Tampa, FL, pp. 1250-1263.
- Chipman, J. W. 1997. "Comparison of TM, ERS-1, and SIR-C Data for Forest Type Mapping in the Lake States." *Proceedings*, Annual Meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), April 1997, Seattle, Washington, pp. 517-526.
- Wynne, R.H., T.M. Lillesand, and J.W. Chipman. 1997. AirStat: a simple program to calculate airphoto interpretation accuracy assessment and summary statistics for classroom instruction. *Proceedings*, Annual Meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), April 1997, Seattle, Washington, p. 419

Cardille, J. A., D. W. Bolgrien, R. H. Wynne, and J. W. Chipman. 1996. "Variation in Landscape Metrics Derived from Multiple Independent Classifications." Proceedings of Eco-Informa, 4-7 November 1996, Lake Buena Vista, FL.

COMMITTEE AND WORKING GROUP MEMBERSHIPS (CURRENT)

Steering Committee, Quantitative Social Sciences Program, Dartmouth College (2014 – present)
Science Advisory Committee for Land Cover Mapping, State of Wisconsin (2014 – present)
Dartmouth Archaeology Working Group (2013 – present)

PROFESSIONAL SOCIETY MEMBERSHIPS

Association of American Geographers
American Geophysical Union
American Society for Photogrammetry and Remote Sensing

REVIEWER

Annals of the Association of American Geographers
Applied Geography
Aquatic Ecology
Ecosystems
Frontiers in Earth Sciences
Global Change Biology
Hydrologic Processes
IEEE Journal of Selected Topics in Earth Observations and Remote Sensing
ISPRS International Journal of Geo-Information
International Journal of Remote Sensing
Journal of Applied Geography
Journal of Great Lakes Research
Lake and Reservoir Management
Landscape Ecology
Photogrammetric Engineering and Remote Sensing
Remote Sensing of Environment
SpringerPlus

NASA proposal review panels
NSF proposal review panels