

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.w.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 EXPERTISE

Geographic information science, spatial analysis, remote sensing
Satellite-based monitoring of terrestrial and aquatic ecosystems
Cartography and geographic data visualization (geovisualization)
Facilitating the adoption of geospatial science and technology in the curriculum

ACADEMIC EMPLOYMENT

- 2007-present Director, Citrin Family GIS/Applied Spatial Analysis Laboratory, Dartmouth College
Geography Department (Faculty, 2007-present), Earth Sciences Department (Adjunct Faculty, 2007-present), Quantitative Social Sciences Program (Steering Committee, 2014-present), and Ecology, Evolution, Environment, and Society (Affiliated Faculty, 2022-present), 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

TEACHING

- Current GEOG 54: Geovisualization
 GEOG 77/EARS 77 & EARS 177: Environmental Applications of GIS
 ENGG 139.02 (co-instructor): Polar Science and Engineering
- Recent past EARS 65/GEOG 51 & EARS 165: Remote Sensing
or as needed GEOG 85: Advanced Reading in Geography
 EARS 87: Special Projects
 Co-instructor for EARS 45, 46, 47: Off campus program in Earth Sciences
- Contributions EARS 16: Hydrology and Water Resources
to other classes EARS 76/ENGS 46: Advanced Hydrogeology
 ENVS 40, 42, 84: Foreign study program in Environmental Studies
 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
- At University IES 301: Introduction to Aerial Photographic Systems
of Wisconsin 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-PI, with lead PI Christopher Sneddon. *Hydropower Development and Knowledge Controversies in Transboundary Rivers*. Arthur L. Irving Institute for Energy and Society award, 2019-2022; \$19,101.
- Co-Investigator (Co-I), with PI Margaret Karagas. *A prospective study of critical environmental exposures in formative early life that impact lifelong health in rural US children*. NIH Epidemiology program, award UG3OD023275. 9/2018-8/2023; \$36,578,865.
- Other personnel, 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 9/1/2017-8/31/2022; \$376,997.
- PI. *A Virtual-Reality Node for Interdisciplinary 3D Visualization in the Spatial Sciences*. Dartmouth College Neukom Institute CompX award, 2019-2021; \$21,586, plus \$12,106 supplementary award (completed).
- Co-I, 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 (completed).
- Co-I, with PI Xun Shi. *Maintaining Environmental Flows and Sustainable Water Use Strategies in a Rapidly Developing Watershed*. Porter Family Foundation, 2013-2017; \$50,000 (completed).
- Other personnel, with PI Christopher Sneddon. *Environmental Conflicts and the Social Dimensions of Dam Removal*. National Science Foundation, Geography Program, award 7/1/2012-6/30/2015; \$257,732 (completed).

- PI (2006-2007, University of Wisconsin) / Co-I (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).
- PI. *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-I (at University of Wisconsin), 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-I (at University of Wisconsin), 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).
- PI (at University of Wisconsin). *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).
- PI on Subcontract (at University of Wisconsin). *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: PEER-REVIEWED JOURNAL ARTICLES

- Bourne, K., A. Curtis, J.W. Chipman, C. Chen, and M. Borsuk. 2023. Patterns of co-contamination in freshwater and marine fish of the northeastern United States. *Environmental Modeling and Assessment*, 2023-06-26. <https://doi.org/10.1007/s10666-023-09912-2>.
- Doughty, A., M. Kelly, J. Russell, M. Jackson, B. Anderson, J.W. Chipman, and B. Nakileza. 2023. Last Glacial Maximum reconstructions of Rwenzori mountain glaciers. *Paleoceanography and Paleoclimatology*, 38(1), p.e2022PA004527. <https://doi.org/10.1029/2022PA004527>.
- He, Y, J.W. Chipman, and J. Mankin. 2022. Rapid land cover and land use change in the Indo-Malaysian region over last 34 years based on AVHRR NDVI data. *Annals of the American Association of Geographers*, 12(8), 2131-2151. <https://doi.org/10.1080/24694452.2022.2077168>.
- Ratti, V., J.W. Chipman, and D. Wallace. 2022. Larval flushing alters malaria endemicity patterns in regions with similar habitat abundance. *Current Research in Parasitology & Vector-Borne Diseases*, 2:100080. <https://doi.org/10.1016/j.crvbd.2022.100080>.
- Buckman, K., R. Mason, E. Seelen, V. Taylor, P. Balcom, J.W. Chipman, and C. Chen. 2021. Patterns in forage fish mercury concentrations across Northeast US estuaries. *Environmental Research*, 194: 110629. <https://doi.org/10.1016/j.envres.2020.110629>.
- Doughty, A., M. Kelly, J. Russell, M. Jackson, B. Anderson, J.W. Chipman, B. Nakileza, and S. Dee. 2021. Modeling glacier extents and equilibrium line altitudes in the Rwenzori Mountains, Uganda,

- over the last 31,000 yr. *Geological Society of America Special Papers*, 548. [https://doi.org/10.1130/2020.2548\(09\)](https://doi.org/10.1130/2020.2548(09)).
- Morgan, B., J.W. Chipman, D. Bolger, and J. Dietrich. 2021. Spatiotemporal analysis of vegetation cover change in a large ephemeral river: multi-sensor fusion of unmanned aerial vehicle (UAV) and Landsat imagery. *Remote Sensing*, 13(1): 51. <https://dx.doi.org/10.3390/rs13010051>.
- Rubin, H., D. Lutz, B. Steele, K. Cottingham, K. Weathers, M. Ducey, M. Palace, K. Johnson, and J.W. Chipman. 2021. Remote sensing of lake water clarity: performance and transferability of both historical algorithms and machine learning. *Remote Sensing* 13(8): 1434. <https://doi.org/10.3390/rs13081434>.
- Webb, M., J. Winter, S. Spera, J.W. Chipman, and E. Osterberg. 2021. Water, agriculture, and climate dynamics in central Chile's Aconcagua River Basin. *Physical Geography*, 1790719. <https://doi.org/10.1080/02723646.2020.1790719>.
- Winter, J, T. Partridge, D. Wallace, J.W. Chipman, M. Ayres, E. Osterberg, and E. Dekker. 2021. Modeling the sensitivity of blacklegged ticks (Acari: Ixodidae) to temperature and land cover in the northeastern United States. *Journal of Medical Entomology*, 58(1): 416-427. <https://doi.org/10.1093/jme/tjaal179>.
- Dominy, N., S. Ikram, G. Moritz, P. Wheatley, J. Christensen, J.W. Chipman, and P. Koch. 2020. Mummified baboons reveal the far reach of early Egyptian mariners. *eLife* 60860. <https://doi.org/10.7554/eLife.60860>.
- Fleisch, A., L. Rokoff, E. Garshick, S. Grady, J.W. Chipman, E. Baker, P. Koutrakis, M. Karagas. 2020. Residential wood stove use and indoor exposure to PM2.5 and its components in northern New England. *Journal of Exposure Science and Environmental Epidemiology*, 30: 350-361. <https://doi.org/10.1038/s41370-019-0151-4>.
- Fleisch, A.F., S.M. Seshasayee, E. Garshick, J.W. Chipman, P. Koutrakis, E.R. Baker, and M.R. Karagas. 2020. Assessment of maternal glycemia and newborn size among pregnant women who use wood stoves in northern New England. *JAMA Network Open*, 3(5):e206046. <https://doi.org/10.1001/jamanetworkopen.2020.6046>.
- Jackson, M., M. Kelly, J. Russell, A. Doughty, J. Howley, J.W. Chipman, D. Cavagnaro, S. Zimmerman, B. Nakileza, and M. Baber. 2020. Glacial fluctuations in tropical Africa during the last glacial termination and implications for tropical climate following the Last Glacial Maximum. *Quaternary Science Reviews*, 243: 106455. <https://doi.org/10.1016/j.quascirev.2020.106455>.
- Liu, J., D. Lawson, R. Hawley, J.W. Chipman, B. Tracy, X. Shi, and Y. Chen. 2020. Estimating the longevity of glaciers in the Xinjiang region of the Tian Shan through observations of glacier area change since the Little Ice Age using high-resolution imagery. *Journal of Glaciology*, 66(257):471-484. <https://doi.org/10.1017/jog.2020.24>.
- Morgan, B., D. Bolger, J.W. Chipman, and J. Dietrich. 2020. Lateral and longitudinal distribution of riparian vegetation along an ephemeral river in Namibia using remote sensing techniques. *Journal of Arid Environments*, 181: 104220. <https://doi.org/10.1016/j.jaridenv.2020.104220>.
- Chipman, J.W. 2019. A multisensor approach to satellite monitoring of trends in lake area, water level and volume. *Remote Sensing*, 11(2):158. <https://doi.org/10.3390/rs11020158>.

- Finger Higgs, R.A., J.W. Chipman, D.A. Lutz, L.E. Culler, R.A. Virginia, and L.A. Ogden. 2019. Changing lake dynamics indicate a drier Arctic in western Greenland. *Journal of Geophysical Research-Biogeosciences*. <https://doi.org/10.1029/2018JG004879>.
- Jackson, M.S., M.A. Kelly, J. Russell, A. Doughty, J. Howley, J.W. Chipman, D. Cavagnaro, B. Nakileza, and S. Zimmerman. 2019. High-latitude warming initiated the onset of the last deglaciation in the tropics. *Science Advances*, 5(12): eaaw2610. <https://doi.org/10.1126/sciadv.aaw2610>.
- Wallace, D., V. Ratti, A. Kodali, J. Winter, M. Ayres, J.W. Chipman, C. Aoki, E. Osterberg, C. Silvanic, T. Partridge, and M. Webb. 2019. Effect of rising temperature on Lyme disease: *Ixodes scapularis* population dynamics and *Borrelia burgdorferi* transmission and prevalence. *Canadian Journal of Infectious Diseases and Medical Microbiology*, 2019: 9817930. <https://doi.org/10.1155/2019/9817930>.
- Winter, J.M., F.L. Bowen, T.F. Partridge, and J.W. Chipman. 2019. Future extreme event risk in the rural northeastern United States. *Annals of the American Association of Geographers*. <https://doi.org/10.1080/24694452.2018.1540920>.
- Heindel, R.C., J.W. Chipman, J.T. Dietrich, and R.A. Virginia. 2018. 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”, 50(1): S100012. <https://doi.org/10.1080/15230430.2017.1415852>.
- Kopec, B., X. Feng, E.S. Posmentier, J.W. Chipman, and R.A. Virginia. 2018. Use of principal component analysis to extract environmental information from lake water isotopic compositions. *Limnology and Oceanography* 63(3): 1340-1354. <https://doi.org/10.1002/lno.10776>.
- Li, B., Y. Chen, J.W. Chipman, and X. Shi. 2018. Why does the runoff in Hotan river show a slight decreased trend in northwestern China? *Atmospheric Sciences Letters* 19(1). <https://doi.org/10.1002/asl.800>.
- Spera, S., J.M. Winter, and J.W. Chipman. 2018. Evaluation of agricultural land cover representations on regional climate model simulations in the Brazilian Cerrado. *Journal of Geophysical Research-Atmospheres*, 123(10): 5163-5176. <https://doi.org/10.1029/2017JD027989>.
- 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. <https://doi.org/10.1080/01431161.2017.1365388>.
- Wallace, D., O. Prosper, J. Savos, A. Dunham, J.W. Chipman, X. Shi, B. Ndenga, and A. Githeko. 2017. Modeling the response of *Anopheles gambiae* (Diptera: Culicidae) populations in the Kenya Highlands to a rise in mean annual temperature. *Journal of Medical Entomology* 54(2): 299-311. <https://doi.org/10.1093/jme/tjw174>.
- Chipman, J.W., X. Shi, F.J. 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. <https://doi.org/10.1117/1.JRS.10.046020>.

- Magilligan, F.J., B. Graber, K.H. Nislow, J.W. 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. <https://doi.org/10.12952/journal.elementa.000108>.
- Heindel, R.C., J.W. Chipman, and R.A. 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. <https://doi.org/10.1080/00045608.2015.1059176>.
- Wallace, D., B. Southworth, X. Shi, J.W. Chipman, and A. Githeko. 2014. A comparison of five malaria transmission models: benchmark tests and implications for disease control. *Malaria Journal*, 13:268. <https://doi.org/10.1186/1475-2875-13-268>.
- Caller T., J.W. 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. <https://doi.org/10.1002/mus.23761>.
- Morriss, B., R. Hawley, J.W. 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. <https://doi.org/10.5194/tc-7-1869-2013>.
- Caller T., N. Field, J.W. 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. <https://doi.org/10.3109/17482968.2011.621436>.
- Chipman, J.W., 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, <https://doi.org/10.1080/17445647.2012.740431>.
- San Gil, I. and 36 other authors including J.W. Chipman. 2009. The Long-Term Ecological Research community metadata standardisation project. *Int. J. Metadata Semantics and Ontologies*, 4: 141-153. <https://doi.org/10.1504/IJMSO.2009.02775>.
- Carpenter, S., B. Benson, R. Biggs, J.W. 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. <https://doi.org/10.1641/B570407>.
- Chipman, J.W. and T.M. Lillesand. 2007. Satellite-based assessment of the dynamics of new lakes in southern Egypt. *International Journal of Remote Sensing*, 28(19): 4365-4379. <https://doi.org/10.1080/01431160701241787>.
- Dash, J., A. Mathur, G. Foody, P. Curran, J.W. Chipman, and T.M. Lillesand. 2007. Land cover classification using multi-temporal MERIS vegetation indices. *International Journal of Remote Sensing*, 28(5-6): 1137-1159. <https://doi.org/10.1080/01431160600784259>.
- Peckham, S., J.W. Chipman, T.M. Lillesand, and S. Dodson. 2006. Alternate stable states and the shape of the lake trophic distribution. *Hydrobiologia*, 571:401-407. <https://doi.org/10.1007/s10750-006-0221-1>.

- Chipman, J.W., T.M. 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. <https://doi.org/10.5589/m03-047>.
- Reese, H., T.M. Lillesand, D. Nagel, J. Stewart, R. Goldmann, T. Simmons, J.W. 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. [https://doi.org/10.1016/s0034-4257\(02\)00039-1](https://doi.org/10.1016/s0034-4257(02)00039-1).
- Means, J., P. Hopkins, J. Jensen, S. Schill, J.W. Chipman, R. Ramsey, and D. Stow. 2001. ARC partnerships: industry and academia explore remote sensing applications. *Journal of Forestry* 99: 4-12.
- Chipman, J.W., T.M. 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.

PUBLICATIONS: BOOKS, BOOK CHAPTERS, AND PEER-REVIEWED REPORTS

- 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*, 5th 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 faculty books by Susan Ackerman, Abigail Neely, Coleen Fox, Chelsey Kivland, Daryl Press, Paul Musselwhite, Walter Simons, Edward Miller, Levi Gibbs, Douglas Irwin, Rashauna Johnson, Chris Sneddon, Robert Baum, Jennifer Fluri, Nadhav Samin, DG Webster, and James Igoe, and for art exhibit catalogs for Margaret Darrow and the Hood Museum.

WORKSHOPS AND PRESENTATIONS AT PROFESSIONAL CONFERENCES

- He, Y., J. Chipman, and J. Mankin. 2020. Rapid Indo-Malaysian land-use and land cover change over the last 35 years. Annual meeting of the American Geophysical Union, December 2020, San Francisco.
- Kelly, M., A. Doughty, J. Russell, M. Jackson, J. Chipman, S. Garelick, N. Anderson, and B. Nakileza. 2019. Amplified temperature change at high elevation in the tropics during the LGM. Annual meeting of the American Geophysical Union, December 2019, San Francisco, CA.
- Lutz, D., H. Rubin, B. Steele, M. Ducey, K. Cottingham, M. Palace, K. Weathers, and J. Chipman. Harnessing machine learning and citizen science data to improve remotely sensed estimates of lake water clarity and document regional clarity trends. Annual meeting of the American Geophysical Union, December 2019, San Francisco, CA.
- Wallace, D., J. Chipman, and V. Ratti. 2019. The impact of hydroclimatological processes on malaria transmission in the Western Kenya Highlands. Annual meeting of the American Geophysical Union, December 2019, San Francisco, CA.
- Wallace, D., J. Chipman, V. Ratti, and M. Shaw. 2019. Integrating land use, topography, and rainfall in a model of larval habitat. International Congress on Industrial and Applied Mathematics, July 2019, Valencia, Spain.
- Jackson, M., M. Kelly, J. Russell, A. Doughty, J. Howley, D. Cavagnaro, J. Chipman, S. Zimmerman, and B. Nakileza. 2019. Tropical glacier fluctuations during late glacial time: a view from equatorial Africa. European Geophysical Union General Assembly, April 2019, Vienna, Austria.
- Jackson, M., M. Kelly, J. Russell, A. Doughty, A. Vickers, J. Shakun, B. Goehring, J. Howley, J. Chipman, D. Cavagnaro, S. Zimmerman, and B. Nakileza. 2019. Holocene glaciation in the African and South American tropics. Geological Society of America, Northeastern Section Annual Meeting, March 2019, Portland, ME.
- Finger, R., J. Chipman, D. Lutz, L. Culler, R. Virginia, and L. Ogden. 2018. A drier Arctic? Evapotranspiration in changing lake dynamics in western Greenland. Annual meeting of the American Geophysical Union, December 2018, Washington, DC.
- Liu, J., D. Lawson, R. Hawley, B. Tracy, J.W. Chipman, X. Shi, Y. Chen. 2018. Estimating the longevity of glaciers in the Tian Shan in Xinjiang, China through remote sensing observations of glacier area change. Annual meeting of the American Geophysical Union, December 2018, Washington, DC.
- Chipman, J. and X. Shi. 2017. Characterizing landscape dynamics using satellite image time series in the Tarim Basin, Xinjiang. Annual meeting of the American Association of Geographers, 6 April 2017, Boston, MA.
- Heindel, R., J. Chipman, J. Dietrich, and R. Virginia. 2017. 3D photogrammetric modeling of aeolian soil erosion in west Greenland. Annual meeting of the American Association of Geographers, 7 April 2017, Boston, MA.
- Winter, J., F. Bowen, T. Partridge, and J. Chipman. 2017. Future extreme event vulnerability in the northeastern United States. Annual meeting of the American Geophysical Union, December 2017, New Orleans, LA.
- 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, 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.

- 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.
- 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.
- Heindel, R., L. Culler, J. Chipman, and R. Virginia. 2015. Soil response to aeolian disturbance in west Greenland. Annual meeting, American Geophysical Union, San Francisco, CA.
- 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.
- 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.
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MENTORING OF POSTDOCTORAL SCHOLARS

2021-present	Joanmarie Del Vecchio (Neukom Fellows program, Dartmouth College)
2020-2022	Ryan Collins (Neukom Fellows program, Dartmouth College)
2019-2021	* Danielle Poole (Neukom Fellows program, Dartmouth College)
2017-2018	Stephanie Spera (Neukom Fellows program, Dartmouth College)
2012-2014	Jason Herrmann (Neukom Fellows program, Dartmouth College)
2006-2007	* Samantha Kaplan (University of Wisconsin-Madison)

* Denotes primary mentor; otherwise co-mentor.

SERVICE ON GRADUATE STUDENT MS/PHD COMMITTEES

In progress	Jonathan Alperstein (PhD, Ecology, Evolution, Environment, and Society), Victoria Halvorson (MS, Earth Sciences), Michelle Irengbam (PhD, Ecology, Evolution, Environment, and Society), Lan Nguyen (PhD, Ecology, Evolution, Environment, and Society), Noemi Ortega (MS, Earth Sciences), Chenyang Su (PhD, Ecology, Evolution, Environment, and Society)
Completed	Jenica Andersen (MS, Earth Sciences), Alexandra Arntsen (PhD, Thayer School of Engineering), Eirik Buraas (MS, Earth Sciences), Ali Giese (PhD, Earth Sciences), Ruth Heindel (PhD, Earth Sciences), Maggie Jackson (PhD, Earth Sciences), Blaine Morriss (MS, Earth Sciences), Thomas Overly (PhD, Earth Sciences), Alex Ronan (MS, Earth Sciences), Torie Roseborough (MS, Earth Sciences), Kristin Schild (PhD, Earth Sciences), Matthew Siegfried (MS, Earth Sciences), Debbie Sulca (MS, Earth Sciences), Nicholas Wright (PhD, Thayer School of Engineering)

REVIEWER

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

Reviewer of grant proposals for the National Aeronautics and Space Administration (NASA), National Science Foundation (NSF), and US Department of Agriculture (USDA).