
KAREN C. SETO

Yale School of Forestry and Environmental Studies

Yale University

380 Edwards Street, New Haven, CT 06511

karen.seto@yale.edu • Phone: 203-432-9784 • Fax: 203-432-5556

<http://urban.yale.edu>

ACADEMIC APPOINTMENTS

- 7/2014– Yale University
Associate Dean of Research, Yale School of Forestry and Environmental Studies
Director of Doctoral Studies, Yale School of Forestry and Environmental Studies
- 7/2013– Yale University
Professor of Geography and Urbanization Science
Yale School of Forestry and Environmental Studies
- 7/2008–6/2013 Yale University
Associate Professor, Yale School of Forestry and Environmental Studies
- 9/2003–7/2008 Stanford University
Assistant Professor, School of Earth Sciences
Department of Environmental Earth System Science (2007-2008)
Department of Geological and Environmental Sciences (2003-2007)
- 9/2007–7/2008 Stanford University
Center Fellow, Woods Institute for the Environment
- 9/2003–8/2007 Stanford University
Center Fellow, Center for Environmental Science and Policy
Freeman Spogli Institute for International Studies
- 9/2000–8/2003 Stanford University
Senior Research Scholar, Center for Environmental Science and Policy
Institute for International Studies

VISITING APPOINTMENTS

- 1/2015-6/2015 National Taipei University, Taiwan
Visiting Professor, Center for Global Change and Sustainability Science
- 5/2011–8/2011 University of Copenhagen, Denmark
Visiting Professor, Department of Geography and Geology
- 9/2010–2/2011 National Taipei University, Taiwan
Visiting Professor, Graduate Institute of Urban Planning

EDUCATION

2000	Ph.D., Geography Boston University
1995	M. A., International Relations & Resource and Environmental Management Boston University
1991	B.A., Political Science, International Relations emphasis University of California, Santa Barbara

AWARDS AND HONORS

2014	Faculty Award for Outstanding Teaching and Advising, Yale School of Forestry and Environmental Studies
2011	Danmarks Nationalbank Foreign Scientist Housing Award
2009	Aldo Leopold Leadership Fellow
2004	NSF Faculty Early Career Development (CAREER) Award
2000	NASA New Investigator Program in Earth Science (Early Career) Award
1987-1991	University of California, Santa Barbara Regents Scholarship

CURRENT RESEARCH

- Urbanization, global change and sustainability
- Climate change mitigation in urban areas
- Urbanization and food systems
- Urbanization in Asia, especially China and India
- Modeling and forecasting urban expansion
- Remote sensing of land-use and land-cover change

INTERNATIONAL SCIENTIFIC COMMITTEES

2005–2016	Co-Chair, Future Earth (formerly International Human Dimensions Programme, IHDP) Urbanization and Global Environmental Change Project
2013–2014	International Geosphere-Biosphere Programme (IGBP) Anthropocene Synthesis Scientific Steering Committee
2010–2014	Coordinating Lead Author, Intergovernmental Panel on Climate Change (IPCC) Working Group III: Mitigation of Climate Change, <i>IPCC Fifth Assessment Report, Chapter 12: Human Settlements, Infrastructure and Spatial Planning</i>
2011–2013	Coordinating Lead Author and Editorial Team, United Nations Convention on Biological Diversity (CBD), <i>Cities and Biodiversity Outlook</i>
2009–2011	Scientific Steering Committee, IPCC Working Groups II and III, Expert Meeting on Human Settlements and Infrastructure
2005–2009	Scientific Steering Committee, Monsoon Asia Integrated Regional Studies (MAIRS), System for Analysis, Research, and Training (START)

2002–2008 Scientific Steering Committee, International Union for the Conservation of Nature (IUCN), Commission on Ecosystem Management

NATIONAL SCIENTIFIC COMMITTEES

2014–2016 U.S. National Research Council Committee on Pathways to Urban Sustainability: Challenges and Opportunities

2011–2014 U.S. National Research Council Geographical Sciences Committee (NRC/NAS Standing Committee)

2010–2015 U.S. Carbon Cycle Science Steering Group

2011–2014 U.S. National Research Council Committee to Advise the U.S. Global Change Research Program

2011–2013 U.S. National Research Council Committee on Needs and Research Requirements for Land-Change Modeling

2008–2010 U.S. National Research Council Committee on Strategic Directions for the Geographical Sciences in the Next Decade

2006–2010 NASA User Working Group for the Socioeconomic Data and Applications Center

2005–2006 U.S. National Research Council Committee on Earth System Science for Decisions About Human Welfare: Contributions of Remote Sensing

PEER-REVIEWED JOURNAL ARTICLES

62. Fragkias, M., Lobo, J., **Seto, K. C.** In Press. A comparison of nighttime light data for urban energy research: insights from scaling analysis in the U.S. system of cities, *Environment and Planning B*. doi:10.1177/0265813516658477.
61. Zhang, Q., Pandey, B., **Seto, K. C.** 2016. A robust method to generate a consistent time series from the DMSP/OLS nighttime light data, *Transactions in Geoscience and Remote Sensing*, doi: 10.1109/TGRS.2016.2572724.
60. Reba, M., Reitsma, F., **Seto, K. C.** 2016. Spatializing 6,000 years of global urbanization from 3700 BC to AD 2000, *Scientific Data*, doi:10.1038/sdata.2016.34.
59. **Seto, K. C.**, Ramankutty, N. 2016. Hidden linkages between urbanization and food systems, *Science* 352(6288): 943-945.
58. Shi, L., Chu, E., Anguelovski, I., Aylett, A., Debats, J., Goh, K., Schenk, T., **Seto, K.C.**, Dodman, D., Roberts, D., Roberts, J.T., VanDeveer, S.D. 2016. Roadmap towards justice in urban climate adaptation research, *Nature Climate Change*, doi: 10.1038/nclimate2841.
57. Biermann, F., Bai, X., Bondre, N., Broadgate, W., Chen, C-T.A., Dube, O.P., Erisman, J.W., Glaser, M., van der Hel, S., Lemos, M.C., Seitzinger, S., **Seto, K.C.** 2016. Down to Earth: Contextualizing the Anthropocene, *Global Environmental Change*, doi: /10.1016/j.gloenvcha.2015.11.004
56. Solecki, W., **Seto, K.C.**, Balk, D., Bigio, A., Boone, C.G., Creutzig, F., Fragkias, M., Lwasa, S., Marcotullio, P., Romero-Lankao, P., Zwickel, T. 2015. A conceptual framework for an urban areas typology to integrate climate change mitigation and adaptation, *Urban Climate* 14: 116-137.
55. van Vliet, J., Magliocca, N.R., Buchner, B., Cook, E., Benayas, J.M.R., Ellis, E.C., Heinemann, A., Keys, E., Lee, T. M., Liu, J., Mertz, O., Meyfroidt, P., Moritz, M., Poeplau, C., Robinson, B. E., Seppelt, R., **Seto, K. C.**, Verburg, P. H. 2015. Meta-studies in land use science: Current coverage and prospects, *Ambio*, doi: 10.1007/s13280-015-0699-8.
54. Gurney, K.R., Romero-Lankao, P., **Seto, K. C.**, Kennedy, C., Grimm, N., Ehleringer, J., Marcotullio, P., Pincetl, S., Feddema, J., Hughes, S., Chester, M.V., Hutyra, L., Sperling, J., Runfola, D. 2015. Climate change: Track urban emissions on a human scale, *Nature* 525: 179-181.
53. Jiang, L., **Seto, K.C.**, Bai, J. 2015. Urban economic development, changes in food consumption patterns and land requirements for food production in China, *China Agricultural Economic Review* 7(2): 240-261.
52. Liu, J., Mooney, H., Hull, V., Davis, S. J., Gaskelle, J., Hertel, T., Lubchenco, J., **Seto, K.C.**, Gleick, P., Kremen, C., Li, S. 2015. Systems integration for global sustainability, *Science* 347: 6225 doi: 10.1126/science.1258832.
51. Güneralp, B., Perlstein, A.S., **Seto, K.C.** 2015. Balancing urban growth and ecological conservation: A challenge for planning and governance in China, *Ambio* 44(6): 532-543.
50. Creutzig, F., Baiocchi, G., Bierkandt, R., Pichler, P-P., **Seto, K. C.** 2015. A global typology of urban energy use and potentials for an urbanization mitigation wedge, *Proceedings of the National Academy of Sciences of the United States of America*. doi: 10.1073/pnas.1315545112.

49. Pandey, B., **Seto, K. C.** 2015. Urbanization and agricultural land loss in India: Comparing satellite estimates with census data, *Journal of Environmental Management* 148: 53-66.
48. Romero-Lankao, P., Gurney, K., **Seto, K. C.**, Chester, M., Duren, R. M., Hughes, S., Hutyra, L.R., Marcotullio, P. J., Baker, L. A., Grimm, N. B., Kennedy, C., Patarasuk, R., Pincetl, S., Runfola, D., Sanchez, L., Shrestha, G., Sarzynski, A., Sperling, J., Stokes, E. 2014. A critical knowledge pathway to low-carbon, sustainable futures: Integrated understanding of urbanization, urban areas, and carbon, *Earth's Future* 2(10): 515-532, doi: 10.1002/2014EF000258.
47. Marcotullio, P. J., Hughes, S., Sarzynski, A., Pincetl, S., Sanchez Pena, L., Romero-Lankao, P., Runfola, D., **Seto, K. C.**, 2014. Urbanization and the carbon cycle: Contributions from social science, *Earth's Future* 2(10): 496-514, doi: 10.1002/2014EF000257.
46. Wentz, E.A., Anderson, S., Fragkias, M., Netzband, M., Mesev, V., Myint, S., Quattrochi, D., Rahman, A., **Seto, K. C.** 2014. Supporting global environmental change research: A review of trends and knowledge gaps in urban remote sensing, *Remote Sensing* 6(5): 3879-3905.
45. Zhang, Q., Wallace, J., Deng, X., **Seto, K. C.** 2014. Central versus local states: which matters more in affecting China's urban growth? *Land Use Policy* 38: 487-496.
44. Hacker, K., **Seto, K. C.**, Costa, F., Reis, M. G., Ko, A. I., Duik-Wasser, M. A. 2013. A multivariate approach to mapping urban slums in Salvador, Brazil using remote sensing and census data, *International Journal of Health Geographics* 12: 45.
43. Güneralp, B., **Seto, K. C.**, Ramachandran, M. 2013. Evidence of urban land teleconnections and impacts on distant hinterlands, *Current Opinion in Environmental Sustainability* 5:1-7.
42. Zhang, Q., **Seto, K. C.** 2013. Can night-time light data identify typologies of urbanization? A global assessment of successes and failures, *Remote Sensing* 5(7), 3476-3494.
41. Jiang, L., Deng, X., **Seto, K. C.** 2013. The impact of urban expansion on agricultural land use intensity in China, *Land Use Policy* 35: 33-39.
40. Fragkias, M., Lobo, J., Strumsky, D., **Seto, K. C.** 2013. Does size matter? Scaling of CO₂ emissions and U.S. urban areas, *Plos One* 8(6): e64727. doi:10.1371/journal.pone.0064727.
39. Frohling, S., Milliman, T., **Seto, K. C.**, Friedl, M. A. 2013. A global fingerprint of macro-scale changes in urban structure from 1999 to 2009, *Environmental Research Letters* <http://dx.doi.org/10.1088/1748-9326/8/2/024004>.
38. Güneralp, B., **Seto, K. C.** 2013. Futures of global urban expansion: Uncertainties and implications for biodiversity conservation, *Environmental Research Letters* doi:10.1088/1748-9326/8/1/014025.
37. Pandey, B., Joshi, P. K., **Seto, K. C.** 2013. Monitoring urbanization dynamics in India using DMSP/OLS night time lights and SPOT-VGT data, *International Journal of Applied Earth Observation and Geoinformation* 23: 49-61.
36. Solecki, W. D., **Seto, K. C.**, Marcotullio, P. 2013. It's time for an urbanization science, *Environment* 55(1): 12-17.

35. Srinivasan, V., **Seto, K. C.**, Emerson, R., Gorelick, S. M. 2013. The impact of urbanization on water vulnerability: a coupled human-environment system approach for Chennai, India, *Global Environmental Change* 23(1): 229-239.
34. Zhang, Q., Schaaf, C., **Seto, K. C.** 2013. The Vegetation Adjusted NTL Urban Index: A new approach to reduce saturation and increase variation in nighttime luminosity, *Remote Sensing of Environment* 129(1): 32-41.
33. Jiang, L., Deng, X., **Seto, K. C.** 2012. Multi-level modeling of urban expansion and cultivated land conversion for urban hotspot counties in China, *Landscape and Urban Planning* 108(2-4): 131-139.
32. Seitzinger, S. P., Svedin, U., Crumley, C., Steffen, W., Abdullah, S. A., Alfsen, C., Broadgate, W. J., Biermann, F. H. B., Bondre, N., Dearing, J. A., Deutsch, L., Dhakal, S., Elmqvist, T., Farahbakhshzad, N., Gaffney, O., Haberl, H., Lavorel, S., Mbow, C., McMichael, A. J., Morais, J., Olsson, P., Pinho, P., **Seto, K. C.**, Sinclair, P., Stafford-Smith, M., Sugar, L. 2012. Planetary stewardship in an urbanising world: beyond city limits, *Ambio* 41(8): 787-794.
31. **Seto, K. C.**, Güneralp, B., Hutyra, L. 2012. Global forecasts of urban expansion to 2030 and direct impacts on biodiversity and carbon pools, *Proceedings of the National Academy of Sciences of the United States of America* 109(40): 16083-16088.
30. Güneralp, B., Reilly, M. K., **Seto, K. C.** 2012. Capturing multiscale feedbacks in urban land change: a coupled systems dynamics spatial logistic approach, *Environment and Planning B* 39(5): 858-879.
29. **Seto, K. C.**, Reenberg, A., Boone, C. G., Fragkias, M., Haase, D., Langanke, T., Marcotullio, P., Munroe, D. K., Olah, B., Simon, D. 2012. Urban land teleconnections and sustainability, *Proceedings of the National Academy of Sciences of the United States of America* 109(20): 7687-7692.
28. Güneralp, B., **Seto, K. C.** 2012. Can gains in efficiency offset the resource demands and CO₂ emissions from constructing and operating the built environment? *Applied Geography* 32(1): 40-50.
27. **Seto, K. C.** 2011. Exploring the dynamics of migration to mega-delta cities in Asia and Africa: Contemporary drivers and future scenarios, *Global Environmental Change* 21(SI): S94-S107.
26. Little, E., Barrera, R., **Seto, K. C.**, Diuk-Wasser, M. 2011. Co-occurrence patterns of the dengue vector *Aedes aegypti* and *Aedes mediovitattus*, a dengue competent mosquito in Puerto Rico, *EcoHealth* 8(3): 365-375.
25. **Seto, K. C.**, Fragkias, M., Güneralp, B., Reilly, M. K. 2011. A meta-analysis of global urban land expansion, *Plos One* 6(8): e23777. doi:10.1371/journal.pone.0023777.
24. Zhang, Q., **Seto, K. C.** 2011. Mapping urbanization dynamics at regional and global scales using multi-temporal DMSP/OLS nighttime light data, *Remote Sensing of Environment* 115(9): 2320-2329.
23. **Seto, K. C.**, Sánchez-Rodríguez, R., Fragkias, M. 2010. The new geography of contemporary urbanization and the environment, *Annual Review of Environment and Resources* 35: 167-194.
22. **Seto, K. C.**, Shepherd, J. M. 2009. Global urban land-use trends and climate impacts, *Current Opinion in Environmental Sustainability* 1(1):89-95.

21. Reilly, M. K., O'Mara, M. P., **Seto, K. C.** 2009. From Bangalore to the Bay Area: Comparing transportation and activity accessibility as drivers of urban growth, *Landscape and Urban Planning* 92(1): 24-33.
20. Fragkias, M., **Seto, K. C.** 2009. Evolving rank-size distributions of intra-metropolitan urban clusters in South China, *Computers, Environment and Urban Systems* 33(3):189-199.
19. Güneralp, B., **Seto, K. C.** 2008. Environmental impacts of urban growth from an integrated dynamic perspective: A case study of Shenzhen, South China, *Global Environmental Change* 18(4): 720-735.
18. Liu, W. G. **Seto, K. C.** 2008. Using the ART-MMAP neural network to predict urban growth: a spatio-temporal data mining approach, *Environment and Planning B* 35(2): 296-317.
17. Fragkias, M., **Seto, K. C.** 2007. Modeling urban growth in data-sparse environments: A new approach, *Environment and Planning B* 34(5): 858-883.
16. **Seto, K. C.**, Fragkias, M. 2007. Mangrove conversion and aquaculture development in Vietnam: A remote sensing-based approach for evaluating the Ramsar Convention on Wetlands, *Global Environmental Change* 17(3-4): 486-500.
15. Kaufmann, R. K., **Seto, K. C.**, Schneider, A., Zhou, L., Liu, Z., Wang, W. 2007. Climate response to rapid urban growth: Evidence of a human-induced precipitation deficit, *Journal of Climate* 20(10): 2299-2306.
14. Boucher, A., **Seto, K. C.**, Journ el, A. G. 2006. A novel method for mapping land cover changes: Incorporating time and space with geostatistics, *IEEE Transactions on Geoscience and Remote Sensing* 44(11): 3427-3435.
13. **Seto, K. C.**, Kaufmann, R. K. 2005. Using logit models to classify land cover and land-cover change from Landsat Thematic Mapper, *International Journal of Remote Sensing* 26(3): 563-577.
12. Schneider, A., **Seto, K. C.**, Webster, D. 2005. Urban growth in Chengdu, western China: Application of remote sensing to assess planning and policy outcomes, *Environment and Planning B* 32(3): 323-345.
11. **Seto, K. C.**, Fragkias, M. 2005. Quantifying spatiotemporal patterns of urban land-use change in four cities of China with time series landscape metrics, *Landscape Ecology* 20(7): 871-888.
10. **Seto, K. C.**, Fleishman, E., Fay, J.P., Betrus, C. J. 2004. Linking spatial patterns of bird and butterfly species richness with Landsat TM derived NDVI, *International Journal of Remote Sensing* 25(20): 4309-4324.
9. Liu, W. G., **Seto, K. C.**, Wu, E. Y., Gopal, S., Woodcock, C. E. 2004. ART-MMAP: A neural network approach to sub-pixel classification, *IEEE Transactions on Geoscience and Remote Sensing* 42(9): 1976-1983.
8. **Seto, K. C.** 2004. Urban growth in South China: Winners and losers of China's policy reforms, *Petermanns Geographische Mitteilungen* 148(5): 50-57.

7. **Seto, K. C.**, Kaufmann, R. K. 2003. Modeling the drivers of urban land use change in the Pearl River Delta, China: Integrating remote sensing with socioeconomic data, *Land Economics* 79(1): 106-121.
6. **Seto, K. C.**, Liu, W. 2003. Comparing ARTMAP neural network with Maximum-Likelihood classifier for detecting urban change, *Photogrammetric Engineering and Remote Sensing* 69(9): 981-990.
5. Duong, N. D., Thoa, L. K., Hoan, H. T., Tuan, T.A., Thu, H.L., **Seto, K. C.** 2003. A study on the urban growth of Hanoi using multi-temporal and multi-sensor remote sensing data, *Asian Journal of Geoinformatics* 3(3): 69-72.
4. **Seto, K. C.**, Woodcock, C. E., Song, C., Huang, X., Lu, J., Kaufmann, R. K. 2002. Monitoring land-use change in the Pearl River Delta using Landsat TM, *International Journal of Remote Sensing* 23(10): 1985-2004.
3. Song, C., Woodcock, C. E., **Seto, K. C.**, Pax-Lenney, M., Macomber, S. A. 2001. Classification and change detection using Landsat TM data: When and how to correct atmospheric effects? *Remote Sensing of Environment* 75(2): 230-244.
2. Kaufmann, R. K., **Seto, K. C.** 2001. Change detection, accuracy, and bias in a sequential analysis of Landsat imagery of the Pearl River Delta, China: econometric techniques, *Agriculture Ecosystems and Environment* 85(1-3): 95-105.
1. **Seto, K. C.**, Kaufmann, R. K., Woodcock, C. E. 2000. Landsat reveals China's farmland reserves, but they're vanishing fast, *Nature* 406(6792): 121.

EDITORIALS AND COMMENTARIES

8. Conway, D., Barnett, J., Betsill, M.M., Lebel, L., **Seto, K. C.** 2014. Global Environmental Change: Taking stock at a time of transition, *Global Environmental Change* 25(1): 1-4.
7. **Seto, K. C.**, Christensen, P. 2013. Remote sensing science to inform urban climate change mitigation strategies, *Urban Climate* 3: 1-6.
6. **Seto, K. C.** 2012. Seeing R-E-D: Making a place for human ecology in highway crossing design, *Ecological Restoration* 30(4): 376-377.
5. Fragkias, M., **Seto, K. C.** 2012. The rise and rise of urban expansion, *IGBP Global Change Magazine* No. 78. March: 16-18.
4. Deng, X., **Seto, K. C.** 2011. The impacts of urbanization on cultivated land change in China, *Urbanization and Global Environmental Change Viewpoints* No. 5, April: 8-11.
3. **Seto, K. C.**, Satterthwaite, D. 2010. Interactions between urbanization and global environmental change, *Current Opinion in Environmental Sustainability* 2(3): 127-128.
2. **Seto, K. C.**, Christensen, P. 2010. Remote sensing of urban areas for climate change science, *Urbanization and Global Environmental Change Viewpoints* No. 4, October: 24-27.
1. Milkowski, A. H., **Seto, K. C.** 2009. Land as a Resource, *Daylight and Architecture*, 12: 51-58.

BOOKS

- Seto, K.C.**, Reba, Meredith. In Progress. *Urban Chromatic*, New Haven: Yale University Press.
- Seto, K. C.**, Solecki, W. D., Griffith, C.A., eds. 2015. *Routledge Handbook on Urbanization and Global Environmental Change*, London: Routledge.
- Seto, K. C.**, Reenberg, A., eds. 2014. *Rethinking Global Land Use in an Urban Era*, Cambridge: MIT Press.
- Elmqvist, T., Schewenius, M., Marcotullio, P., McDonald, R., Parnell, S., Fragkias, M., Guneralp, B., **Seto, K.C.**, Goodness, J., Wilkinson, C., eds. 2013. *Urbanization, Biodiversity, and Ecosystem Services*, Frankfurt: Springer.

BOOK CHAPTERS

17. Mitra, C., Pandey, B., Allen, N.B., **Seto, K.C.** 2015. Contemporary urbanization in India, in *Routledge Handbook on Urbanization and Global Environmental Change*, Seto, K. C., Solecki, W. D., Griffith, C.A., eds. London: Routledge.
16. Chang, L-F., **Seto, K. C.**, Huang, S-L. 2013. Climate Change, Urban Flood Vulnerability and Responsibility in Taipei, in *Linking Urban Ecology, Environmental Justice and Global Environmental Change: A Framework for Urban Sustainability*, Boone, C. G., Fragkias, M., eds. Springer Press.
15. **Seto, K. C.** 2011. Monitoring Urban Growth and Its Environmental Impacts Using Remote Sensing: Examples from China and India, in *Global Urbanization*, Birch, E., Wachter, S., eds. Penn Institute for Urban Research and University of Pennsylvania Press, pp. 151-166.
14. **Seto, K. C.**, de Groot, R., Bringezu, S., Erb, K., Graedel, T. E., Ramankutty, N., Reenberg, A., Schmitz, O. J., Skole, D. L. 2009. Stocks, Flows, and Prospects of Land, in *Linkages of Sustainability*, Graedel, T. E., van der Voet, E., eds. MIT Press, pp. 71-96.
13. **Seto, K. C.** 2009. Global Urban Issues: A Primer, in *Global Mapping of Human Settlements: Experiences, Data Sets, and Prospects*, Gamba, P., Herold, M., eds. Taylor and Francis Press, pp. 3-10.
12. Boucher, A., **Seto, K. C.** 2009. Methods and Challenges for Using High-Temporal Resolution Data for Monitoring Urban Growth, in *Global Mapping of Human Settlements: Experiences, Data Sets, and Prospects*, Gamba, P., Herold, M., eds. Taylor and Francis Press, pp. 339-350.
11. **Seto, K. C.**, Ojima, D., Song, Q., Mosier, A. 2008. Human Drivers of Change in the East Asian Monsoon System, in *Changes in the Human-Monsoon System of East Asia in the Context of Global Change*. Freney, J., Stewart, J., Virji, H., eds., World Scientific Press, pp. 335-347.
10. Fragkias, M., **Seto, K. C.** 2007. Urban Land Use Change Models, Uncertainty, and Policymaking in Rapidly Growing Developing World Cities, in *Land Use Change: Science, Policy and Management*. Hill, M. J., Aspinall, R., eds., CRC Press, pp. 139-161.

9. **Seto, K. C.** 2007. Urbanization in China: The Pearl River Delta Example, in *Our Changing Planet: A View from Space*, King, M., Williams, R. G., Partington, K., eds. Cambridge University Press, pp. 186-189.
8. **Seto, K. C.**, Fragkias, M., Schneider, A. 2007. 20 Years After Reforms: Challenges to Planning and Development in China's City-Regions and Opportunities for Remote Sensing, in *Applied Remote Sensing for Urban Planning, Governance and Sustainability*, Redman, C., Stefanov, W., Netzband, M., eds. Springer-Verlag, pp. 249-271.
7. Liu, W. G., **Seto, K. C.**, Sun, Z., Tian, Y. 2006. Urban Land Use Prediction Model with Spatiotemporal Data Mining and GIS, in *Urban Remote Sensing*, Weng, Q., Quattrochi, D. A., eds., CRC Press/Taylor and Francis, pp. 165-178.
6. **Seto, K. C.** 2005. Economies, Societies, and Landscapes in Transition: Examples From the Pearl River Delta, China and the Red River Delta, Vietnam, in *Population, Land Use, Environment: Research Directions*. National Research Council Panel on New Research on Population and the Environment. Entwisle, B., Stern, P., eds., NRC Press, Washington, D. C. pp. 193-218.
5. Matson, P., Luers, A. L., **Seto, K. C.**, Naylor, R., Ortiz-Monasterio, I. 2005. People, Land Use, and Environment in the Yaqui Valley, Sonora, Mexico, in *Population, Land Use, Environment: Research Directions*. National Research Council Panel on New Research on Population and the Environment. Entwisle, B., Stern, P., eds., NRC Press, Washington, D. C. pp. 238-264.
4. **Seto, K. C.**, Woodcock, C. E., Kaufmann, R. K. 2004. Land Cover/Land Use Change: A Case Study of the Pearl River Delta, China, in *Land Change Science: Observing, Monitoring, and Understanding Trajectories of Change on the Earth's Surface*, Gutman, G., Justice, C., eds., Kluwer Academic Publishers, pp. 223-246.
3. Brown, D., Walker, R., Manson, S., **Seto, K. C.** 2004. Modeling Land Cover and Land Use Change, in *Land Change Science: Observing, Monitoring, and Understanding Trajectories of Change on the Earth's Surface*, Gutman, G., Justice, C., eds., Kluwer Academic Publishers, pp. 395-409.
2. Elvidge, C. D., Sutton, P. C., Wagner, T. W., Ryznar, R., Goetz, S. J., Smith, A. J., Jantz, C., **Seto, K. C.**, Imhoff, M. L., Yang, Y. Q., Milesi, C., Nemani, R. 2004. Urbanization, in *Land Change Science: Observing, Monitoring, and Understanding Trajectories of Change on the Earth's Surface*, Gutman, G., Justice, C., eds., Kluwer Academic Publishers, pp. 315-328.
1. **Seto, K. C.**, Kaufmann, R. K., Woodcock, C. E. 2000. Monitoring Land Use Change in the Pearl River Delta, China, in *Linking People, Place, and Policy: A GISc Approach*, Crews-Meyer, K., Walsh, S., eds., Kluwer Academic Publishers, pp. 69-90.

PUBLISHED CONFERENCE PROCEEDINGS

8. Boucher, A., **Seto, K. C.**, Journ el, A. G. 2005. Mapping land cover changes with Landsat imagery and spatio-temporal geostatistics, *Seventh International Geostatistics Congress*, Sept. 26- Oct. 1, Banff, Canada.
7. Schneider, A., **Seto, K. C.**, Woodcock, C. E. 2003. Spatial and temporal patterns of land cover change in Chengdu, China, 1978-2002, *Proceedings of the International Geoscience and Remote Sensing Symposium (IGARSS) 5:3365-3367*.

6. **Seto, K. C.**, Nguyen, D. 2002. Using a multi-sensor approach to monitoring urban growth in Hanoi: 1973-2001, *Proceedings of the International Symposium on Remote Sensing of Urban Areas*, Istanbul, Turkey.
5. **Seto, K. C.**, Kaufmann, R. K. 2001. Identifying urbanization in a time series of Landsat imagery: An econometric technique, *Proceedings of the International Symposium on Remote Sensing of Urban Areas*, Regensburg, Germany.
4. **Seto, K. C.**, Song, C., Woodcock, C. E. 1999. Land-use, land-cover change in the Pearl River Delta, 1988-1996: evidence from Landsat TM, *Proceedings of the American Society for Photogrammetry and Remote Sensing Annual Conference*, Portland, Oregon, pp. 633-636.
3. **Seto, K. C.**, Robinson, C. A., Maxwell, T. A., El-Baz, F. 1997. Digital image processing of Landsat and SIR-C data to emphasize drainage patterns in Southwestern Egypt,” *Proceedings of the Twelfth International Conference and Workshops on Applied Geologic Remote Sensing*, Denver, Colorado, pp. 93-100.
2. Robinson, C. A., El-Baz, F., **Seto, K. C.** 1997. The role of the image processor in planetary instrument definition, Division for Planetary Sciences of the American Astronomical Society Twenty-Ninth Annual Meeting, *Bulletin of the Astronomical Society*, Vol. 29, No. 3.
1. Robinson, C. A., El-Baz, F., **Seto, K. C.** 1996. Imaging Radar (SIR-C) data of the Eastern Sahara, International Geological Correlations Program (IGCP), Project 391, ROSTAS/UNESCO, pp. 37-39.

SCIENTIFIC COMMITTEE REPORTS

7. **Seto, K. C.**, Dhakal, S., Bigio, A., Blanco, H., Delgado, G. C., Dewar, D., Huang, L., Inaba, A., Kansal, A., Lwasa, S., Mueller, D. B., Murakami, J., Nagendra, H., and Ramaswami, A. 2014. “Human Settlements, Infrastructure and Spatial Planning,” in *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the IPCC Fifth Assessment Report of the Intergovernmental Panel on Climate Change*.
6. Edenhofer, O., Pichs-Madruga, R., Sokona, Y., Agrawala, S., Bashmakov, I., Blanco, G., Broome, J., Bruckner, T., Brunner, S., Bustamante, M., Clarke, L., Creutzig, F., Dhakal, S., Navroz Dubash, K., Gomez-Echeverri, L., Eickemeier, P., Farahani, E., Fishedick, M., Fleurbaey, M., Gerlagh, R., Gupta, S., Gupta, S., Harnish, J., Jiang, K., Kadner, S., Kartha, S., Klasen, S., Kolstad, C., Krey, V., Kunreuther, H., Lucon, O., Masera, O., Minx, J., Mulugetta, Y., Patt, A., Ravindranath, N.H., Riahi, K., Roy, J., Schaeffer, R., Schlomer, S., **Seto, K. C.**, Seyboth, K., Sims, R., Skea, J., Smith, P., Somanathan, E., Stavins, R., von Stechow, C., Sterner, T., Sugiyama, T., Suh, S., Urama, K., Urge-Vorsatz, D., Victor, D., Zhou, D., Zou, J., Zwickel, T. 2014. *Summary for Policymakers. Contribution of Working Group III to the IPCC Fifth Assessment Report of the Intergovernmental Panel on Climate Change*.
5. Brown, D. B., Band, L. E., Green, K. O., Irwin, E. G., Jain, A., Lambin, E. F., Pontius Jr., R. G., **Seto, K. C.**, Turner II, B. L., Verburg, P. H. 2013. *Advancing Land Change Modeling: Opportunities and Research Requirements*. National Research Council Committee on Needs and Research Requirements for Land Change Modeling. The National Academies Press, Washington, D. C.
4. Elmqvist, T., Fragkias, M., Güneralp, B., Marcotullio, P., McDonald, R., Parnell, S., Sendstad, M., **Seto, K. C.**, Wilkinson, C., eds. 2013. *Global Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities*. Springer, Amsterdam.

3. Washington, W. M. (Chair), Lee, K. N., Abbott, M. R., Arent, D., Avery, S. K., Dickinson, R. E., Dietz, T., Jacoby, H. D., Lemos, M. C., Noble, I. R., Parmesan, C., **Seto, K. C.**, Tierney, K. J., Vorosmarty, C. J., Wallace, J. M., Yohe, G. W. 2012. *A Review of the U.S. Global Change Research Program's Draft Strategic Plan*. The National Academies Press, Washington, D. C.
2. Murphy, A. B. (Chair), Colleton, C., Downs, R. M., Goodchild, M. F., Hansen, S., Lawson, V. A., MacDonald, G. M., Magilligan, F. J., Moseley, W. G., Polsky, C., **Seto, K. C.**, Wright, D. J. 2010. *Strategic Directions for the Geographical Sciences in the Next Decade*. The National Academies Press, Washington, D. C. The National Academies Press, Washington, D. C.
1. DeFries, R. (Chair), Balstad, R., Colwell, R., Evans, T. P., Lam, N., Michaelsen, J., **Seto, K.C.**, Wilson, M. L. 2007. *Contributions of Land Remote Sensing for Decisions About Food Security and Human Health*. The National Academies Press, Washington, D. C.

OTHER REPORTS

6. Simon, D., Fragkias, M., Leichenko, R., Sanchez-Rodriguez, R., **Seto, K. C.**, Solecki, W. 2011. *The Green Economy and the Prosperity of Cities*, UN Habitat Background Paper for the *State of World Cities 2012/2013*.
5. Sanchez, R. C., **Seto, K. C.**, Simon, D., Solecki, W. D., Kraas, F., Laumann, G. 2004. *Urbanization and Global Environmental Change Science Plan*, International Human Dimensions Programme on Global Environmental Change (IHDP), Report Series No. 15, Bonn, Germany.
4. Sanchez, R., C. (ed.), Caldwell, B., Dhakal, S., Nsiah-Gyabaah, K., Kraas, K., Ling, O., Medvedkov, O., **Seto, K. C.**, Simon, D., Solecki, W. D., Thiem, M., Schulz, V. 2003. *Scoping Report on Urbanization and Global Environmental Change*, International Human Dimensions Programme on Global Environmental Change (IHDP), Bonn, Germany.
3. Kaufmann, R. K., **Seto, K. C.** 1994. "Models of OPEC oil pricing," U.S. Environmental Protection Agency.
2. Kaufmann, R. K., **Seto, K. C.** 1994. "Energy income and price elasticities of demand in developing countries." Nomura Research Institute.
1. Kaufmann, R. K., Li, H., Pauly, P., **Seto, K. C.**, Sweitzer, J. 1993. "A preliminary analysis of international aspects of a carbon tax: the role of the world oil market," U.S. Environmental Protection Agency.

INVITED SPEAKER AT CONFERENCES AND WORKSHOPS

- 2015 American Geophysical Union Fall Meeting Union Session, "What's the big deal with the Anthropocene?" San Francisco, CA.
- 2015 London School of Economics, Urban Age Global Debates, "Confronting Climate Change: Can Cities be the Solution?" London, UK.
- 2015 4th Nobel Laureates Symposium on Global Sustainability, "4C: Changing Climate, Changing Cities," Hong Kong. Presentation title: *Mitigation of Climate Change in Urban Areas: Lessons from IPCC AR5*.

- 2014 London School of Economics, Urban Age Conference, New Delhi, India. Presentation title: *Global Urban Land Expansion: Trends, Projections and Impacts*.
- 2014 NASA Workshop on Land Cover and Land Use Dynamics in South and South East Asia, ICIMOD, Kathmandu, Nepal. Presentation title: *Urbanization and Agricultural Land Change in India: Observations, Trends, and Future Directions*.
- 2014 The Future is Now: Urban Asia in the 21st Century, Boston University. Presentation title: *Urbanization in India and China: Problem or Panacea for Environmental Sustainability?*
- 2014 KOSMOS Summer University FutureLand, Humboldt University, Berlin. Presentation title: *Rethinking Urban Dynamics and Spatial Transformations: From Theory to Models*.
- 2014 Thinking Inside Out: How Cities Can Contribute to Solving Global Problems. Side Event to the United Nations' Preparatory Committee Meetings on Habitat III. Presentation title: *How Cities Can Contribute to Mitigating Climate Change*.
- 2013 Ecological Society of America Annual Meeting, Minneapolis, MN. Presentation title: *Urban land teleconnections*.
- 2013 Congress of the Society for Urban Ecology, Berlin, Germany. Presentation title (plenary): *Rethinking Urban Land Change, From Theory to Models*.
- 2012 American Geophysical Union Fall Meeting, Union Presentation, San Francisco, CA. Presentation title: *Global forecasts of urban expansion to 2030 and impacts on biodiversity and carbon pool*, Seto, K. C., Güneralp, B., Hutyrá, L. R.
- 2012 Can There Be a Science of Cities? Santa Fe Institute, Santa Fe, NM. Presentation title: *Rethinking urbanization and sustainability: Lessons learned from satellite data*.
- 2012 Central Arizona-Phoenix Long Term Ecological Research (CAP-LTER) 14th Annual All Scientists Meeting. Skysong, Scottsdale, AZ. Presentation title (plenary): *Rethinking Urbanization and Sustainability: Lessons from China and India*.
- 2011 Workshop on Planetary Stewardship. International Geosphere-Biosphere Programme (IGBP), Stockholm, Sweden. Presentation title: *Sustainable Urbanization*.
- 2011 NOW Urbanism: City-Making in the 21st Century and Beyond. University of Washington, Seattle, WA. Presentation title: *New Geographies of Urbanization and Re-Conceptualizing Sustainability*.
- 2011 Industrial Transformation, Urbanization, and Human Security in the Asia Pacific. Taiwan International Human Dimensions Programme (IHDP) National Committee, Taipei, Taiwan. Presentation title (plenary): *Urban Growth and Growing Vulnerabilities to Climate Change in Asia*.
- 2010 Open Science Meeting of the IHDP Urbanization and Global Environmental Change Project and IHDP/IGBP Global Land Project. Arizona State University, Tempe, AZ. Presentation title (plenary): *Urban-Rural Teleconnections and Challenges and Opportunities for Land Sustainability*.

- 2009 Workshop on Climate Change Impacts and Integrated Assessment. Energy Modeling Forum, Snowmass, CO. Presentation title: *Climate Change and Urban Areas*.
- 2009 World Social Science Forum. International Social Science Council, Bergen, Norway. Presentation title: *Can Urbanization Save Land for Nature?*
- 2009 Cities at Risk Conference. System for Analysis, Research, and Training (START), Bangkok, Thailand. Presentation title: *Dynamics of Urban Growth in the Pearl River Delta, China*.
- 2008 Shanghai Forum. Shanghai, China. Presentation title: *Environmental Challenges of Urban Growth in China*.
- 2007 Global Urban Summit. Rockefeller Foundation, Bellagio, Italy. Presentation title: *Opportunities and Limitations for Monitoring and Forecasting Urban Growth*.
- 2007 Sustainable Urban Futures Workshop. United Nations, New York, NY. Presentation title: *Identifying Urban Constellations: Opportunities and Limitations for Monitoring and Forecasting Urban Growth with Remote Sensing*.
- 2006 Land Use and Land Cover Harmonization Workshop. United Nations Food and Agriculture Organization, Rome, Italy. Presentation title: *Urbanization and Global Environmental Change*.
- 2006 Imaging Environment: Maps, Models, and Metaphors. Stanford Humanities Center, Stanford, CA. Presentation title: *10,000 Shovels: Rapid Urban Growth in South China*.
- 2004 Workshop on Research on Population, Land Use, and Environment. National Research Council, Irvine, CA. Presentation title: *Economies, Societies, & Landscapes in Transition: Examples from the Pearl River Delta, China, and the Red River Delta, Vietnam*.
- 2004 Workshop on Rapid Assessment of Global Environmental Change in East Asia. System for Analysis, Research, and Training (START) and Scientific Committee on Problems of the Environment (SCOPE), Hangzhou, China. Presentation title: *Human Forcing of Change in the Monsoon System and Region*.
- 2004 Urbanization and Global Environmental Change in Latin America. Inter-America Institute, Mexico City, Mexico. Presentation title: *Global Environmental Change: Biophysical Processes of Urbanization*.
- 2004 International Conference on Science and Technology for Sustainability: Asian Megacities and Global Sustainability. Science Council of Japan, Tokyo, Japan. Presentation title (plenary): *A Tale of Two Deltas: Drivers and Outcomes of Urban Development in China and Vietnam*.

INVITED SPEAKER AT ACADEMIC INSTITUTIONS

- 2015 University of Massachusetts Boston, Dimensions of Sustainability Symposium. *Sustainability Science: Roots and Branches*.
- 2015 National Cheng Kung University, Taiwan. Presentation title, *Mitigation of Climate Change in Asian Cities: Lessons from IPCC AR5*.
- 2014 University of Pennsylvania, School of Design. Presentation title: *Sustainable Urbanization in India and China: Challenges, Opportunities and Lessons from the IPCC*.
- 2014 South Dakota State University, Virginia & John Holtry Distinguished Lecture. Presentation title: *Urbanization in China and India: Trends, Challenges, and Opportunities*.

- 2014 South Dakota State University, Geospatial Sciences Center of Excellence. Presentation title: *Remote sensing for urbanization science: Recent advances with VIIRS, MODIS, and DMSP OLS.*
- 2013 University of Miami, Department of Geography and Regional Studies. Presentation title: *Urbanization and Climate Change: Lessons from China and India*
- 2013 University of Tennessee, Knoxville, Baker Center Interdisciplinary Forum on Environmental Policy. Presentation title: *Rethinking urbanization and sustainability: Lessons from China and India.*
- 2012 Duke University, Nicholas School of the Environment. Presentation title: *Mega-Urbanization in China and India: Environmental Opportunities and Challenges.*
- 2012 Yale University, School of Management Guangdong Provincial Government Leadership Program. Presentation title: *Climate Change Risks and Mitigating Climate Change in Asian Cities.*
- 2011 Clark University, Graduate School of Geography Wallace W. Atwood Lecture. Presentation title: *Urbanization Trends in China.*
- 2011 Copenhagen University, Department of Geography. Presentation title: *Urbanization and Global Environmental Change: Land Sustainability Challenges and Prospects.*
- 2010 National University of Singapore. Presentation title: *Urban Growth in Asia: Challenges and Opportunities for Sustainability.*
- 2010 Macalester College. Presentation title: *Urban Growth in China: Environmental Challenges and Opportunities.*
- 2010 Institute for Geographical Sciences and Natural Resources Research, China Academy of Sciences, China. Presentation title: *Urbanization and Environmental Change in Asia: Challenges and Prospects for Sustainability.*
- 2010 Yale-Tsinghua Environment and Sustainable Development Leadership Program, Yale University. Presentation title: *Sustainable Urban Growth and Land Use: Twin Pillars of Sustainable Development.*
- 2009 University of Connecticut, Environmental Engineering Seminar Series. Presentation title: *Remote Sensing of Urban Growth in China.*
- 2008 Stanford University, Woods Institute for the Environment. Presentation title: *Sustainable Urban Policy as Environmental Policy.*
- 2007 Tsinghua University, Shenzhen, China. Presentation title: *The New Urban Landscape: Growth, Change, and Planning for the Next Silicon Valley.*
- 2007 Stanford University, School of Earth Sciences Public Lecture Series. Presentation title: *Made in China.*
- 2007 Stanford University, Department of Anthropology. Presentation title: *Mangroves, Aquaculture, and Ramsar: Do International Environmental Agreements Matter?*
- 2007 UC Berkeley, Energy Resources Group. Presentation title: *Rapid Urban Growth in South China.*

- 2007 Stanford University, Vice Provost for Undergraduate Education (VPUE) Program. Presentation title: *Geographic Information Technologies to Map, Monitor, and Model Earth*.
- 2006 Stanford University, Knight Professional Journalism Program. Presentation title: *Urban Growth from Bangalore to the Bay Area*.
- 2005 Indiana University, The Center for the Study of Institutions, Population, and Environmental Change (CIPEC). Presentation title: *Urban Growth in China: Challenges and Prospects*.
- 2004 Bryn Mawr College, Geology Department. Presentation title: *A Tale of Two Deltas: Rapid Urbanization and Land-Use Change in China and Vietnam*.
- 2003 UC Berkeley, Energy Resources Group. Presentation title: *A Tale of Two Deltas: Drivers and Outcomes of Land-Use Changes in Vietnam and China*.
- 2003 Stanford University, Archaeometry Seminar. Presentation title: *Monitoring Land-Use and Land-Cover Change with Remote Sensing and GIS*.
- 2002 Stanford University, Department of Geological and Environmental Studies, Eco-nomy Seminar Presentation title: *The Impact of Economic Growth on Urban Sprawl in China: Observations From Satellite Imagery*.
- 2001 Stanford University, Department of Electrical Engineering, Radioscience Seminar Presentation title: *Monitoring Urban Growth in the Pearl River Delta Using Landsat TM*.
- 2001 UC Berkeley, Center for the Assessment and Monitoring of Forest and Environmental Resources. Presentation title: *Land-Use Change in the Pearl River Delta, China: Econometric Techniques*.
- 2000 Stanford University, Asia/Pacific Research Center. Presentation title: *Monitoring and Modeling Urban Growth in South China: Integrating Remote Sensing with Socioeconomic Data*.
- 1999 University of Rhode Island, Department of Natural Resources. Presentation title: *Remote Sensing of Urban Growth: Observations from Landsat TM*.

INVITED SPEAKER AT ORGANIZATIONS

- 2014 Global Environment Facility, Washington, D. C. Presentation title: *Mitigation of Climate Change: Key Results from IPCC AR5*.
- 2011 Danish Meteorological Institute, Copenhagen, Denmark. Presentation title: *Multi-Scale and Multi-Sensor Analysis of Urban Cluster Development and Agricultural Land Loss in China and India*.
- 2009 Wood Creek Capital Management, Great Mountain Forest, CT. Presentation title: *Urbanization Trends in China: Emerging Opportunities and Challenges*.
- 2009 Lingnan Foundation, New York, NY. Presentation title: *Rapid Urbanization in China: Examples from the Pearl River Delta*.
- 2008 Rotary Club, Livermore, CA. Presentation title: *California's Vulnerability to Climate Change: Scenarios for the Next Twenty Years*.
- 2008 Stanford University Alumni Association, Atlanta, GA. Presentation title: *Urban Growth in China: Environmental Challenges and Prospects*.

- 2007 Stanford Graduate School of Business Executive Program, Business Strategies for Environmental Sustainability, Stanford Sierra Camp, CA. Presentation title: *Land-Use and Land-Cover Change: Patterns, Drivers, and Consequences*.
- 2006 KQED Public Radio Lecture Series, San Francisco, CA. Presentation title: *China from the Inside: Urban Growth Trends*.
- 2006 Commonwealth Club of California, San Francisco, CA. Presentation title: *Urban Growth in China: Challenges and Prospects*.
- 2005 International Human Dimensions Programme, China National Committee, Beijing, China. Presentation title: *Urbanization and Global Environmental Change*.

CONFERENCE PRESENTATIONS (SPEAKER UNDERLINED)

- 2011 Ecological Society of America Annual Meeting, Austin, TX. Presentation title: *Material Flows and Land Use Change in Two Urban Areas of Hawai'i Island*. Chertow, M., Seto, K. C.
- 2009 The International Scientific Conference on Climate Change, Copenhagen, Denmark. Presentation title: *Urban Land-Use Change and Reduced Precipitation In Rapidly Growing Chinese Cities*, Kaufmann, R. K., Seto, K. C., Schneider, A., Zhou, L., Liu, Z., Wang, W.
- 2009 The International Scientific Conference on Climate Change, Copenhagen, Denmark. Presentation title: *A Meta-Analysis of Global Trends in Urban Land-Use Change: Indicators of Resilience, Vulnerability, or Adaptation?* Seto, K. C., Fragkias, M., Güneralp, G., Reilly, M. K.
- 2009 World Bank Fifth Urban Research Symposium. Cities and Climate Change: Responding to an Urgent Agenda, Marseille, France. Presentation title: *Impacts of Urban Expansion on Local Precipitation in South China*. Kaufmann, R. K., Seto, K. C., Schneider, A., Zhou, L., Liu, Z., Wang, W.
- 2008 Association of American Geographers Annual Meeting, Boston, MA. Presentation title: *The Urban Transformation of Earth's Surface: Some Observations*. Seto, K. C.
- 2008 Association of American Geographers Annual Meeting, Boston, MA. Presentation title: *Feedback Dynamics of Urban Growth and Its Environmental Impacts: An Example from China*. Güneralp, G., Seto, K. C.
- 2005 Human Dimensions of Global Environmental Change Open Meeting, Bonn, Germany. Presentation title: *Land-use and land-cover processes in relation to urban change*. Seto, K. C.
- 2004 Association of American Geographers Annual Meeting, Philadelphia, PA. Presentation title: *Patterns and Drivers of Urban Land-Use Change in Asia: Examples from Two Deltas*. Seto, K. C.
- 2004 The Urban Dimensions of Environmental Change: Science, Exposures, Policies, and Technologies, Shanghai, China. Presentation title: *Spatial and Temporal Patterns of Urban Growth: Drivers and Consequences*. Seto, K. C.
- 2003 Human Dimensions of Global Environmental Change Open Meeting, Montreal, Canada. Presentation title: *A Tale of Two Deltas: Drivers and Outcomes of Urban Development in China and Vietnam*. Seto, K. C.
- 2002 International Symposium on Remote Sensing of Urban Areas, Istanbul, Turkey. Presentation title: *Using a Multi-Sensor Approach to Monitoring Urban Growth in Greater Hanoi, 1975-2001*. Seto, K. C., Duong, N. D.

- 2002 Association of American Geographers Annual Meeting, Los Angeles, CA. Presentation title: *Monitoring the Impact of Political Events on Urban Growth in the Pearl River Delta: Examples From Landsat TM*. Seto, K. C.
- 2001 Asian Conference on Remote Sensing, Singapore. Presentation title: *Land-Use Change in a Time Series of Landsat Imagery for the Pearl River Delta, China: An Econometric Technique*. Kaufmann, R. K., Seto, K. C.
- 2001 International Symposium on Remote Sensing of Urban Areas, Regensburg, Germany. Presentation title: *Identifying Urbanization in a Time Series of Landsat Imagery: An Econometric Technique*. Kaufmann, R. K., Seto, K. C.
- 2001 American Geophysical Union Annual Meeting, San Francisco, CA. Presentation title: *Coastal land-use dynamics in southern Sonora, Mexico, between 1973-2001*. Luers, A., Seto, K. C., Matson, P., Naylor, P., Castillo, G.
- 2000 American Association for the Advancement of Science Annual Meeting, Washington, D.C. Presentation title: *Rapid Urbanization in Southern China: Observations from Landsat TM*. Seto, K. C.
- 1999 International Symposium of Geoinformatics and Socioinformatics, Ann Arbor, MI. Presentation title: *A Change Vector Analysis of Land-Use Change in the Pearl River Delta, 1988-1996*. Seto, K. C., Song, C., Woodcock, C. E.
- 1999 American Society for Photogrammetry and Remote Sensing Annual Conference, Portland, OR. Presentation title: *Land-Use and Land-Cover Change in the Pearl River Delta, 1988-1996: Evidence From Landsat TM*. Seto, K. C., Song, C., Woodcock, C. E.

FUNDED GRANTS

- 2015-2018 NASA Land-Cover and Land-Use Change Program
Synthesis of LCLUC Studies on Urbanization: State of the Art, Gaps in Knowledge, and
New Directions in Remote Sensing Science
PI: **K. C. Seto**
\$779,991
- 2014-2017 NASA Land-Cover and Land-Use Change Program
Land Cover and Land Use Changes and Their Effects on Carbon Dynamics in South and
Southeast Asia: A Synthesis Study
PI: Atul Jain (U of Illinois, Urbana-Champaign)
~\$700,000
- 2013-2016 NASA Interdisciplinary Research in Earth System Science Program
Understanding Impacts of Desert Urbanization on Climate and Surrounding Environments
to Foster Sustainable Cities Using Remote Sensing and Numerical Modeling
PI: Soe Myint (Arizona State)
\$765,990
- 2011-2015 NASA Land-Cover and Land-Use Change Program
Multi-Scale and Multi-Sensor Analysis of Urban Cluster Development and Agricultural
Land Loss in China and India
PI: **K.C. Seto**
\$1,290,116
- 2012-2013 Yale MacMillan Center
Comparing drivers of urban land-use change in India and China: The role of planning
institutions and planning professionals
PI: **K.C. Seto**
\$15,000
- 2011-2013 NASA Carbon Cycle Science Program
United States Stream Evasion and CO₂ Evasion
PI: Peter A. Raymond (Yale)
\$507,981
- 2010-2011 NASA Land-Cover and Land-Use Change Program
Workshop on Forecasting Urban Land-Use Change: An Earth System Science Perspective
PI: Michail Fragkias (Arizona State)
\$40,000
- 2009-2011 Yale Climate and Energy Institute
Global Warming Impacts on CT Salt Marsh Ecosystems and Consequent Effects on Salt
Marsh Vulnerability to Sea Level Rise
PI: Melinda D. Smith (Yale)
\$99,000

- 2009-2011 Yale Climate and Energy Institute
Land Surface Properties, Regional Climate Feedbacks and Urban Adaptations
PI: Ronald B. Smith (Yale)
\$100,000
- 2009-2011 NSF Urban Long-Term Research Area (ULTRA) Exploratory Program
Human-Nature Interactions in an Urbanized Island Setting: Hilo and Kailua-Kona, Hawai'i
as Model Socio-Ecological Systems
PI: Marian Chertow (Yale)
\$145,346
- 2009-2010 Connecticut Space Grant College Consortium
Remote Sensing of Land-Cover and Land-Use Change
PI: **K.C. Seto**
\$7,452
- 2008-2011 NASA Land Cover and Land Use Change Program
Monitoring and Modeling Urbanization in China: A Mixed Methods and Multi-Scale
Approach
PI: Annemarie Schneider (Wisconsin)
\$621,651
- 2007-2008 Qatar Ministry of Commerce
GIS/4D Models and Analysis of the Development of Doha and Qatar Free Zone Areas
PI: Martin Fischer (Stanford)
\$395,000
- 2006-2008 Stanford Environmental Interdisciplinary Initiatives Program
From Bangalore to the Bay Area: Comparative Urban Growth Patterns Across the Pacific
Rim
PI: **K.C. Seto**
\$150,000
- 2005-2006 The UPS Foundation
Urban Decentralization Dynamics and the Effects of Transportation Network Expansion in a
System of Cities in Southeast China
PI: **K.C. Seto**
\$30,000
- 2004-2006 Stanford Environmental Interdisciplinary Initiatives Program
Mitigating Future Arsenic Catastrophes Within Asia: An Integrative Study of Processes
Controlling Arsenic Release Induced by Land Use
PI: Scott Fendorf (Stanford)
\$148,000
- 2004-2005 National Geographic Society
Coupled Human-Environment Interactions in Vietnam: Urbanization and Coastal
Transformation
PI: **K.C. Seto**
\$23,000

- 2004-2009 NSF Faculty Early Career Development (CAREER) Award
Urban land-use change in Asia
PI: **K.C. Seto**
\$430,000
- 2003-2004 NASA and Institute for Advanced Education in Geospatial Sciences, University of Mississippi
Model Curriculum for Remote Sensing: Ecosystems Modeling Applications
PI: Erica Fleishman
\$80,000
- 2002-2003 NASA and Center for GeoSpatial Workforce Development, University of Mississippi
Model Curriculum for Remote Sensing: Remote Sensing of the Environment
PI: **K.C. Seto**
\$80,000
- 2001-2005 NASA New Investigator Program (Early Career) Award
Monitoring and Modeling Land-Use Change: Integrating Remote Sensing with Socioeconomic Drivers
PI: **K.C. Seto**
\$316,000
- 1997-2000 NASA Land-Cover and Land-Use Change Program
Modeling and Forecasting Effects of Land-Use Change in China Based on Socioeconomic Drivers
PI: Robert K. Kaufmann
\$320,000

JOURNAL ACTIVITIES

EDITORSHIP OR EDITORIAL/ADVISORY BOARD

- 2014– Co- Editor-in-Chief, *Global Environmental Change*
2016– Associate Editor, *Urban Science*
2015– Editorial Board, *Climatic Change*
2015– Editorial Board, *Remote Sensing*
2015– Editorial Board, *World Development*
2012– Editorial Board, *Urban Climate*
2012– Editorial Board, *Land*
2012– Advisory Board, *New Directions in Sustainability and Society*, Cambridge University Press book series
2009– Editorial Board, *Current Opinion in Environmental Sustainability*

JOURNAL REVIEWER

Agriculture, Ecosystems & Environment
Annual Review of Environment and Resources
Applied Geography
Climatic Change
Climate Policy
Computers, Environment and Urban Systems

Conservation Biology
Ecological Economics
Ecological Restoration
Ecology and Society
Environmental Management
Frontiers in Ecology and the Environment

Global Change Biology
Global Energy Assessment
Global Environmental Change
Global and Planetary Change
International Journal of Remote Sensing
*International Journal of Geographical
 Information Science*
Journal of Arid Environments
Journal of Environmental Management
Journal of Geophysical Research, Atmospheres
Journal of Land Use Science
Land Use Policy

Landscape and Urban Planning
Nature
*Photogrammetric Engineering and Remote
 Sensing*
Population-Environment Review
*Proceedings of the National Academy of
 Sciences of the United States of America*
Remote Sensing of Coastal Environments
*Remote Sensing of Environment
 Science*

PROPOSAL REVIEWER

Belgian Federal Science Policy Office, Research Programme for Earth Observation
 Bundesministerium für Bildung und Forschung (German Federal Ministry of Education and Research)
 Program on Sustainable Development of the Megacities
 Dissertations Initiative for the Advancement of Climate Change Research
 Inter-American Institute for Global Change Research
 International Foundation for Science
 NASA Carbon Cycle and Ecosystems Program
 NASA Earth System Science Fellowship
 NASA Land Cover/Land Use Change Program
 NASA New Investigator Program
 NSF Faculty Early Career Development (CAREER) Program
 NSF East Asia and Pacific Program
 NSF Geology and Paleontology
 NSF Geomorphology and Land Use Dynamics
 NSF Geography and Regional Science/Geography and Spatial Sciences
 NSF Graduate Research Fellowship Program
 NSF Hydrological Sciences Program
 NSF International Research Fellows Program
 NSF Integrative Graduate Education and Research Traineeship (IGERT)
 NSF International Planning Visits and Workshops Program

YALE UNIVERSITY SERVICE

2016 Chair, Yale School of Forestry and Environmental Dean Search Committee
 2013–'16 Yale Climate and Energy Institute Steering Committee
 2013– Advisory Committee on Library Policy
 2012– President's Committee on Racial and Ethnic Harassment
 2012– Silliman College Fellow
 2012–'15 Freshman Advisor
 2011–'12 Yale School of Forestry and Environmental Studies, Masters Admissions Committee
 2009– Environmental Studies Faculty Advisory Committee
 2008–'09 Yale School of Forestry and Environmental Studies, Doctoral Admissions Committee

WORKSHOP AND CONFERENCE ORGANIZATION

- 2016 Co-Chair, “Urban Transitions Global Summit,” international conference, Shanghai, China
- 2014 Co-Chair, Urbanization and Global Environmental Change Regional Workshop on “Urbanization and Environmental Change in China,” Beijing, China
- 2014 Co-Chair, International Science and Planning Committee, “Second International Conference on Urbanization and Global Environmental Change,” Taipei, Taiwan
- 2014 Co-Organizer, IARU Sustainability Science Congress, “Sustainable Urbanization,” Copenhagen, Denmark
- 2012 Co-Chair, Ernst Strungmann Forum on “Rethinking Global Land Use in an Urban Era,” Frankfurt, Germany
- 2011 Co-Organizer, “Urban Responses to Climate Change in Asia: Understanding Mitigation and Adaptation Strategies,” Taipei, Taiwan
- 2011 Co-Organizer, “Sustainable Land Use in an Urbanizing World,” IHDP Urbanization and Global Environmental Change Project and Global Land Project joint workshop, Copenhagen, Denmark
- 2011 Co-Organizer, “Forecasting Urban Land-Use Change,” NASA-sponsored workshop, Arizona State University
- 2010 Co-Chair, International Science and Planning Committee, International Conference on Urbanization and Global Environmental Change, Arizona State University
- 2010 International Science and Planning Committee, IHDP Taiwan Conference, Taipei, Taiwan
- 2008 Organizer and Convener, “Workshop on Satellite Remote Sensing for Mangrove Monitoring,” IUCN World Conservation Congress, Barcelona, Spain
- 2004 Co-Organizer, “Climate Change Resilience in an Urbanizing Western Africa,” Science-Policy Workshop, Dakar, Senegal
- 2004 Organizer, “Urbanization and Global Environmental Change” panel session, 2004 AAG meeting
- 2004 Co-Organizer, “Remote Sensing for Ecosystem Management,” IUCN World Conservation Congress, Bangkok, Thailand

PROFESSIONAL AFFILIATIONS

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