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ACADEMIC APPOINTMENTS

7/2017–12/2018 Yale University
Senior Associate Dean of Research, School of Forestry and Environmental Studies

5/2017– Yale University
Frederick C. Hixon Professor of Geography and Urbanization Science

7/2014–12/2018 Yale University
Associate Dean of Research, School of Forestry and Environmental Studies
Director of Doctoral Studies, School of Forestry and Environmental Studies

7/2013–5/2017 Yale University
Professor of Geography and Urbanization Science
School of Forestry and Environmental Studies

7/2008–6/2013 Yale University
Associate Professor, 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

EDUCATION

- 2000 Ph.D., Geography
Boston University
Advisors: Robert Kaufmann and Curtis Woodcock
- 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

- 2018 Elected member, Connecticut Academy of Science and Engineering
- 2017 Elected member, U.S. National Academy of Sciences
- 2017 Elected fellow, American Association for the Advancement of Science
- 2017 Ecological Society of America, Sustainability Science Award
- 2017 American Association of Geographers, Human Dimensions of Global Change
Research Excellence Award
- 2015 Taiwan Ministry of Science and Technology Visiting Foreign Scholar Fellowship
- 2014 Faculty Award for Outstanding Teaching and Advising, Yale School of Forestry
and Environmental Studies
- 2011 Danmarks Nationalbank Foreign Scientist Housing Award
- 2011 Taiwan National Science Council Visiting Foreign Scholar Fellowship
- 2009 Aldo Leopold Leadership Fellow
- 2004 NSF Faculty Early Career Development (CAREER) Award
- 2000 NASA New Investigator Program in Earth Science (Early Career) Award

CURRENT RESEARCH

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

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

INTERNATIONAL SCIENTIFIC COMMITTEES

- 2018– Coordinating Lead Author, Intergovernmental Panel on Climate Change (IPCC) Working Group III: Mitigation of Climate Change, *IPCC Sixth Assessment Report, Chapter 8: Urban Systems and Other Settlements*.
- 2017–2018 Scientific Steering Committee, IPCC Cities and Climate Change International Scientific Conference
- 2005–2016 Co-Chair, Urbanization and Global Environmental Change Project, a core science project of Future Earth (formerly IHDP, the International Human Dimensions Programme)
- 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, *IPCC Fifth Assessment Report, Chapter 12: Human Settlements, Infrastructure and Spatial Planning*
- 2011–2013 Coordinating Lead Author and Editorial Team, United Nations Convention on Biological Diversity (CBD), *Cities and Biodiversity Outlook*
- 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

DOMESTIC SCIENTIFIC COMMITTEES

- 2017–2018 NSF Advisory Committee for Environmental Research and Education, Subcommittee on Sustainable Urban Systems
- 2016–2018 NASA User Working Group for Land Processes Distributed Active Archive Center
- 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
- 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 (SEDAC)
- 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

78. Pandey, B., Zhang, Q., **Seto, K.C.** 2018. Time series analysis of satellite data to characterize multiple land use transitions: A case study of urban growth and agricultural land loss in India, *Journal of Land Use Science*, doi.org/10.1080/1747423X.2018.1533042.
77. Shughrue, C., **Seto, K.C.** 2018. Systemic vulnerabilities of the global urban-industrial network to hazards, *Climatic Change*, doi.org/10.1007/s10584-018-2293-0.
76. Stokes, E., **Seto, K.C.** 2018. Tradeoffs in environmental and equity gains from job accessibility, *Proceedings of the National Academy of Sciences of the United States of America*, doi.org/10.1073/pnas.1807563115.
75. York, A.M., Alberti, M., Conrow, L., Fischer, H., Inostroza, L., Jantz, C., Pickett, S.T.A., **Seto, K.C.**, Taubenböck, H., Wentz, E.A. 2018. Six fundamental aspects for conceptualizing multidimensional urban form, *Landscape and Urban Planning*, 179: 55-62.
74. McDonald, R. I., Güneralp, B., Huang, C-W., **Seto, K. C.**, You, M. 2018. Conservation priorities to protect vertebrate endemics from global urban expansion, *Biological Conservation* 224: 290-299.
73. Moran, D., Kanemoto, K., Jiborn, M., Wood, R., Többen, J., **Seto, K.C.** 2018. Carbon footprints of 13,000 cities, *Environmental Research Letters*, doi.org/10.1088/1748-9326/aac72a
72. Huang, C-W., McDonald, R.I., **Seto, K.C.** 2018. The importance of land governance for biodiversity conservation in an era of global urban expansion, *Landscape and Urban Planning*, doi.org/10.1016/j.landurbplan.2018.01.011.
71. Román, M.O., Wang, Z., Sun, Q., Kalb, V., Miller, S.D., Molthan, A., Schultz, L., Bell, J., Stokes, E.C., Pandey, P., **Seto, K.C.**, Hall, D., Oda, T., Wolfe, R.E., Lin, G., Golpayegani, N., Devadiga, S., Davidson, C., Sarkar, S., Praderas, C., Schmaltz, J., Boller, R., Stevens, J., Ramos González, O.M., Padilla, E., Alonso, J., Detrés, Y., Armstrong, R., Miranda, I., Conte, Y., Marrero, N., MacManus, K., Esch, T., Masuoka, E.J. 2018. NASA's Black Marble nighttime lights product suite, *Remote Sensing of Environment*, 210(1): 113-143.
70. Güneralp, B., Lwasa, S., Masundire, H., Parnell, S., **Seto, K.C.** 2017. Urbanization in Africa: Challenges and opportunities for conservation, *Environmental Research Letters* 13: 015002, doi.org/10.1088/1748-9326/aa94fe.
69. Lane, K.J., Stokes, E.C., **Seto, K.C.**, Thanikachalam, S., Thanikachalam, M., Bell, M.L. 2017. Associations between greenness, impervious surface area, and nighttime lights on biomarkers of vascular aging in Chennai, India, *Environmental Health Perspectives*, doi:10.1289/EHP541.

68. Pandey, B., Zhang, Q., **Seto, K.C.** 2017. Comparative evaluation of relative calibration methods for DMSP/OLS nighttime lights, *Remote Sensing of Environment*, doi.org/10.1016/j.rse.2017.04.011.
67. Güneralp, B., Zhou, Y., Ürge-Vorsatz, D., Gupta, M., Yu, S., Patel, P., Fragkias, M., Li, X., **Seto, K.C.** 2017. Global scenarios of urban density and its impacts on building energy use through 2050, *Proceedings of the National Academy of Sciences of the United States of America*, doi:10.1073/pnas.1606035114.
66. Bren d'Amour, C., Reitsma, F., Baiocchi, G., Barthel, S., Güneralp, B., Erb, K-H., Haberl, H., Creutzig, F., **Seto, K.C.** 2016. Future urban expansion and implications for global croplands, *Proceedings of the National Academy of Sciences of the United States of America*, doi:10.1073/pnas.1606036114.
65. Stokes, E. C., **Seto, K.C.** 2016. Climate change and urban land systems: Bridging the gaps between Urbanism and Land Science, *Journal of Land Use Science*, 11(6): 698-708, doi:10.1080/1747423X.2016.1241316.
64. **Seto, K.C.**, Davis, S.J., Mitchell, R. B., Stokes, E.C., Unruh, G., Ürge-Vorsatz, D. 2016. Carbon lock-in: Types, causes, and policy implications, *Annual Review of Environment and Resources*, 41: 425-452, doi: 10.1146/annurev-environ-110615-085934.
63. Creutzig, F., Fernandez, B., Haberl, H., Khosla, R., Mulugetta, Y., **Seto, K.C.** 2016. Beyond technology: Demand-side solutions to climate change mitigation, *Annual Review of Environment and Resources*, 41: 173-198, doi: 10.1146/annurev-environ-110615-085428.
62. Fragkias, M., Lobo, J., **Seto, K.C.** 2016. A comparison of nighttime lights 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, *Nature 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., Pooplau, 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. 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., Corburn, J. Reis, M. G., Ko, A. I., Diuk-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., Farahbakhshazad, 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

12. Ürge-Vorsatz, D., **Seto, K.C.**, 2018. 1.5°C Climate change and urban areas, *Current Opinion in Environmental Sustainability*, 30: iv-vi.
11. Ürge-Vorsatz, D., Rosenzweig, C., Sanchez, R., Dawson, R., Bai, X., Salisu, A., **Seto, K.C.**, Dhakal, S. 2018. Locking-in positive climate responses in cities, *Nature Climate Change*, 8:174-177.
10. Acuto, M., Parnell, S., **Seto, K.C.** 2018. Building a global urban science, *Nature Sustainability*, 1:2-4.
9. **Seto, K.C.**, Golden, J.S., Alberti, M., Turner II, B.L. 2017. Sustainability in an urbanizing planet, *Proceedings of the National Academy of Sciences of the United States of America*, www.pnas.org/cgi/doi/10.1073/pnas.1606037114.
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, M. 2018. *City Unseen: New Visions of an Urban Planet*, 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.

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27. 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.
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25. **Seto, K.C.**, Reenberg, A. 2014. "Rethinking global land use in an urban era: An introduction," in *Rethinking Global Land Use in an Urban Era*, Seto, K.C., Reenberg, A., eds. Cambridge: MIT Press.
24. Boone, C.G., Redman, C.L., Blanco, H., Haase, D., Koch, J., Lwasa, S., Nagendra, H., Pauleit, S., Pickett, S.T.A., **Seto, K.C.**, Yokohari, M. 2014. "Reconceptualizing land for sustainable urbanity," in *Rethinking Global Land Use in an Urban Era*, Seto, K.C., Reenberg, A., eds. Cambridge: MIT Press.
23. Deng, X., Lin, Y., **Seto, K.C.** 2014. "Land-use competition between food production and urban expansion in China," in *Rethinking Global Land Use in an Urban Era*, Seto, K.C., Reenberg, A., eds. Cambridge: MIT Press.
22. Elmqvist, T., Fragkias, M., Goodness, J., Güneralp, B., Marcotullio, P.J., McDonald, R.I., Parnell, S., Schewenius, M., Sendstad, M., **Seto, K.C.**, Wilkinson, C., Alberti, M., Folke, C., Frantzeskaki, N., Haase, D., Katti, M., Nagendra, H., Niemelä, J., Pickett, S.T.A., Redman, C.L., Tidball, K. 2013. "Stewardship of the biosphere in the urban era," in *Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities: A Global Assessment*, Elmqvist, T., Schewenius, M., Marcotullio, P., McDonald, R., Parnell, S., Fragkias, M., Güneralp, B., Seto, K.C., Goodness, J., Wilksinson, C., eds. Frankfurt: Springer.
21. Fragkias, M., Güneralp, B., **Seto, K.C.**, Goodness, J. 2013. "A synthesis of global urbanization projections," in *Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities: A Global Assessment*, Elmqvist, T., Schewenius, M., Marcotullio, P., McDonald, R., Parnell, S., Fragkias, M., Güneralp, B., Seto, K.C., Goodness, J., Wilksinson, C., eds. Frankfurt: Springer.
20. Güneralp, B., McDonald, R.I., Fragkias, M., Goodness, J., Marcotullio, P.J., **Seto, K.C.** 2013. "Urbanization forecasts, effects on land use, biodiversity, and ecosystem services," in *Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities: A Global Assessment*, Elmqvist,

- T., Schewenius, M., Marcotullio, P., McDonald, R., Parnell, S., Fragkias, M., Güneralp, B., Seto, K.C., Goodness, J., Wilksinson, C., eds. Frankfurt: Springer.
19. **Seto, K.C.**, Parnell, S. Elmqvist, T. 2013. "A global outlook on urbanization," in *Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities: A Global Assessment*, Elmqvist, T., Schewenius, M., Marcotullio, P., McDonald, R., Parnell, S., Fragkias, M., Güneralp, B., Seto, K.C., Goodness, J., Wilksinson, C., eds. Frankfurt: Springer.
 18. Güneralp, B., **Seto, K.C.** 2013. "Sub-regional assessment of China: Urbanization in biodiversity hotspots," in *Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities: A Global Assessment*, Elmqvist, T., Schewenius, M., Marcotullio, P., McDonald, R., Parnell, S., Fragkias, M., Güneralp, B., Seto, K.C., Goodness, J., Wilksinson, C., eds. Frankfurt: Springer.
 17. **Seto, K.C.**, Lansing, S. 2013. "Regional assessment of Asia," in *Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities: A Global Assessment*, Elmqvist, T., Schewenius, M., Marcotullio, P., McDonald, R., Parnell, S., Fragkias, M., Güneralp, B., Seto, K.C., Goodness, J., Wilksinson, C., eds. Frankfurt: Springer.
 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," 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.A., 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.
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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.

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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.

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9. National Science Foundation, Advisory Committee for Environmental Research and Education. 2018. *Sustainable Urban Systems: Articulating a Long-Term Convergence Research Agenda*. A Report from the NSF Advisory Committee for Environmental Research and Education. Prepared by the Sustainable Urban Systems Subcommittee. Ramswami, A., Bettencourt, L., Clarens, A., Das, S., Fitzgerald, G., Irwin, E., Pataki, D., Pincetl, S., **Seto, K.**, Waddell, P.
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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.

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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. (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 PARTICIPANT/SPEAKER AT CONFERENCES AND WORKSHOPS

- 2018 International Forum on Urbanization and Global Environmental Change in Asia: Knowledge Gaps and Research Needs, Taipei, Taiwan.
- 2018 Gordon Research Conference on Industrial Ecology: The Role of Industrial Ecology in Reaching the Sustainable Development Goals, Les Diablerets, Switzerland.
- 2017 Open Imagery Network Thought Leaders' Summit, Bill and Melinda Gates Foundation, Seattle, USA.
- 2017 Scoping meeting for the IPCC Special Report on Climate Change and Desertification, Land Degradation, Food Security, Sustainable Land Management and GHG Fluxes in Terrestrial Ecosystems, Dublin, Ireland.
- 2016 UN Habitat III, "Conflicts of an Urban Age," Quito, Ecuador
- 2015 Walter Orr Roberts Memorial Lecture, Aspen Global Change Institute
- 2015 American Geophysical Union Fall Meeting Union Session, "What's the big deal with the Anthropocene?" San Francisco, USA.
- 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.
- 2014 London School of Economics, Urban Age Conference, New Delhi, India.
- 2014 NASA Workshop on Land Cover and Land Use Dynamics in South and South East Asia, ICIMOD, Kathmandu, Nepal.
- 2014 The Future is Now: Urban Asia in the 21st Century, Boston University
- 2014 KOSMOS Summer University FutureLand, Humboldt University, Berlin.
- 2014 Thinking Inside Out: How Cities Can Contribute to Solving Global Problems. Side Event to the United Nations' Preparatory Committee Meetings on Habitat III.
- 2013 Ecological Society of America Annual Meeting, Minneapolis, MN.
- 2013 Congress of the Society for Urban Ecology, Berlin, Germany.
- 2012 American Geophysical Union Fall Meeting, Union Presentation, San Francisco, CA.
- 2012 Can There Be a Science of Cities? Santa Fe Institute, Santa Fe, NM.
- 2012 Central Arizona-Phoenix Long Term Ecological Research (CAP-LTER) 14th Annual All Scientists Meeting. Skysong, Scottsdale, AZ.
- 2011 Workshop on Planetary Stewardship. International Geosphere-Biosphere Programme (IGBP), Stockholm, Sweden.
- 2011 NOW Urbanism: City-Making in the 21st Century and Beyond. University of Washington, Seattle, WA.
- 2011 Ernst Strüngmann Forum on Linkages of Sustainability. Frankfurt, Germany.
- 2011 Industrial Transformation, Urbanization, and Human Security in the Asia Pacific. Taiwan International Human Dimensions Programme (IHDP) National Committee, Taipei, Taiwan.
- 2010 Open Science Meeting of the IHDP Urbanization and Global Environmental Change Project and IHDP/IGBP Global Land Project. Arizona State University, Tempe, AZ.
- 2009 Scoping meeting for the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report, Venice, Italy.
- 2009 Workshop on Climate Change Impacts and Integrated Assessment. Energy Modeling Forum, Snowmass, CO.
- 2009 World Social Science Forum. International Social Science Council, Bergen, Norway.
- 2009 Cities at Risk Conference. System for Analysis, Research, and Training (START), Bangkok, Thailand.
- 2008 Shanghai Forum. Shanghai, China.
- 2007 Global Urban Summit. Rockefeller Foundation, Bellagio, Italy.
- 2007 Sustainable Urban Futures Workshop. United Nations, New York, NY.

- 2006 Land Use and Land Cover Harmonization Workshop. United Nations Food and Agriculture Organization, Rome, Italy.
- 2006 Imaging Environment: Maps, Models, and Metaphors. Stanford Humanities Center, Stanford, CA.
- 2004 Workshop on Research on Population, Land Use, and Environment. National Research Council, Irvine, CA.
- 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.
- 2004 Urbanization and Global Environmental Change in Latin America. Inter-America Institute, Mexico City, Mexico.
- 2004 International Conference on Science and Technology for Sustainability: Asian Megacities and Global Sustainability. Science Council of Japan, Tokyo, Japan.
- 2003 Roundtable on Science and Technology for Sustainability. National Academy of Sciences, Rapid Urbanization Working Group. Washington, D. C.
- 2003 NASA Northern Eurasian Earth Science Partnership Initiative Science Plan Workshop, Suzdal, Russia.
- 2001 Second Technical Design Meeting. Millennium Ecosystem Assessment, Cape Town, South Africa.

INVITED SPEAKER AT ACADEMIC INSTITUTIONS

- 2018 McGill University, Trottier Symposium: Planning for Resiliency in the Face of Climate Change
- 2018 Belmont University, Annual Environmental Science Lecture
- 2018 Iowa State, Department of Geological and Atmospheric Sciences
- 2018 Indian Institute for Human Settlements, Bangalore, India
- 2017 The Ohio State University, Arthur H. Robinson Lecture
- 2017 MIT, Department of Urban Studies and Planning
- 2017 University of British Columbia
- 2017 Macalester College, Lanegran Day Lecture
- 2016 University of Washington, Stice Lecture
- 2015 University of Massachusetts Boston, Dimensions of Sustainability Symposium
- 2015 National Cheng Kung University, Taiwan
- 2014 University of Pennsylvania, School of Design
- 2014 South Dakota State University, Virginia & John Holtry Distinguished Lecture
- 2014 South Dakota State University, Geospatial Sciences Center of Excellence
- 2013 University of Miami, Department of Geography and Regional Studies
- 2013 University of Tennessee, Knoxville, Baker Center Interdisciplinary Forum on Environmental Policy
- 2012 Duke University, Nicholas School of the Environment
- 2012 Yale University, School of Management Guangdong Provincial Government Leadership Program
- 2011 Clark University, Graduate School of Geography Wallace W. Atwood Lecture
- 2011 Copenhagen University, Department of Geography
- 2010 National University of Singapore
- 2010 Macalester College
- 2010 Institute for Geographical Sciences and Natural Resources Research, China Academy of Sciences, China
- 2010 Yale-Tsinghua Environment and Sustainable Development Leadership Program, Yale University
- 2009 University of Connecticut, Environmental Engineering Seminar Series
- 2008 Stanford University, Woods Institute for the Environment

- 2007 Tsinghua University, Shenzhen, China
- 2007 Stanford University, School of Earth Sciences Public Lecture Series
- 2007 Stanford University, Department of Anthropology
- 2007 UC Berkeley, Energy Resources Group
- 2007 Stanford University, Vice Provost for Undergraduate Education Program
- 2006 Stanford University, Knight Professional Journalism Program
- 2005 Indiana University, The Center for the Study of Institutions, Population, and Environmental Change (CIPEC)
- 2004 Bryn Mawr College, Geology Department
- 2003 UC Berkeley, Energy Resources Group
- 2003 Stanford University, Archaeometry Seminar
- 2002 Stanford University, Department of Geological and Environmental Studies
- 2001 Stanford University, Department of Electrical Engineering
- 2001 UC Berkeley, Center for the Assessment and Monitoring of Forest and Environmental Resources
- 2000 Stanford University, Asia/Pacific Research Center
- 1999 University of Rhode Island, Department of Natural Resources

INVITED SPEAKER AT ORGANIZATIONS

- 2016 World Resources Institute, Ross Center for Sustainable Cities
- 2016 World Bank, Pollution Management and Competitive Cities Workshop
- 2014 Global Environment Facility, Washington, D. C
- 2011 Danish Meteorological Institute, Copenhagen, Denmark
- 2009 Wood Creek Capital Management, Great Mountain Forest, CT
- 2009 Lingnan Foundation, New York, NY
- 2008 Rotary Club, Livermore, CA
- 2008 Stanford University Alumni Association, Atlanta, GA
- 2007 Stanford Graduate School of Business Executive Program, Business Strategies for Environmental Sustainability, Stanford Sierra Camp, CA
- 2006 KQED Public Radio Lecture Series, San Francisco, CA
- 2006 Commonwealth Club of California, San Francisco, CA
- 2005 International Human Dimensions Programme, China National Committee, Beijing, China

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

- 2018-2019 Resources for the Future, Molly K. Macauley Award for Research Innovation and Advanced Analytics for Policy
The value of measuring and mapping montane urbanization
PI: E. Fenichel (Yale)
\$99,946
- 2018-2019 The National Socio-Environmental Synthesis Center (SESYNC)
Linkages of Agrobiodiversity in Urban Systems and Food-Producing Landscapes
PI: K. Zimmerer (Penn State)
~\$92,000 (funds internally managed at SESYNC)
- 2018-2021 NSF/Belmont Forum
Understanding Innovative Initiatives for Governing Food, Water and Energy Nexus in Cities
PI: J. Puppim de Oliveira (FGV/EAESP, Brazil)
\$1,218,942 EUR (~\$1,513,316 USD)
\$366,626 (Seto/Yale)
- 2018-2019 NASA
Development of VIIRS Algorithms and NASA Black Marble Product Suite
PI: **K.C. Seto**
\$129,620
- 2018-2020 NASA
NASA'S Black Marble Product Suite: Algorithm Refinement and Validation Efforts
PI: **K.C. Seto**
\$200,373
- 2018 Alfred P. Sloan Foundation
PI: **K.C. Seto**
\$30,250
- 2017-2020 NASA Land-Cover and Land-Use Change Program
Urban Growth, Land-Use Change, and Growing Vulnerability in the Greater Himalaya Mountain Range Across India, Nepal, and Bhutan
PI: **K.C. Seto**
\$749,815
- 2016-2017 Yale MacMillan Center
The Spatial Structure of Cities: A Comparative Global Study
PI: **K.C. Seto**
\$8,000
- 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: S. 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
- 2011-2014 Ernst Strungmann Forum, Frankfurt, Germany
Rethinking Global Land Use in an Urban Era
PI: K. Seto
~\$250,000 (funds managed internally at Ernst Strungmann Forum)
- 2011-2013 NASA Carbon Cycle Science Program
United States Stream Evasion and CO₂ Evasion
PI: P. 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: M. 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: M. D. Smith (Yale)
\$99,000
- 2009-2011 Yale Climate and Energy Institute
Land Surface Properties, Regional Climate Feedbacks and Urban Adaptations
PI: R. 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: M. 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: A. 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: M. 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: S. 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: E. 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: R. K. Kaufmann
\$320,000

JOURNAL ACTIVITIES

EDITORSHIP OR EDITORIAL/ADVISORY BOARD

- 2014– Co- Editor-in-Chief, *Global Environmental Change*
2018– Editorial Advisory Panel, *Nature Sustainability*
2018– Editorial Board, *Earth System Governance*
2016– Associate Editor, *Urban Science*
2015– Editorial Board, *Climatic Change*
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
Environmental Science & Technology
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

ADVISORY BOARDS

2018– PEAK Urban
 2017– Mercator Research Institute on Global Commons and Climate Change (MCC)
 2017– The Ian L. McHarg Center for Urbanism and Ecology, U of Pennsylvania
 2016– Urban Dynamics Institute, Oak Ridge National Laboratory

YALE UNIVERSITY SERVICE

2017– University-Wide Data-Intensive Social Science Committee
 2017–'18 Climate Solutions Panelist for University Science Strategy Committee
 2016–'17 Silliman Lectureship Committee
 2016–'17 Ad Hoc Committee on Procedures for Resolving Complaints of Faculty Misconduct
 2016– Yale Center for Research Computing Steering Committee
 2015–'16 Chair, Yale School of Forestry and Environmental Dean Search Committee
 2013–'16 Yale Climate and Energy Institute Steering Committee
 2013–'15 Advisory Committee on Library Policy

- 2012-'15 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

YALE UNIVERSITY TEACHING

YALE COLLEGE

From Dongguan to Delhi: China and India's Urbanization and the Environment (S2013)
 Urbanization, Food Systems, and the Environment (F2013)

YALE SCHOOL OF FORESTRY AND ENVIRONMENTAL STUDIES

Contemporary Issues and Research Methods in the Urban Environment (S2018)
 Urban Indicators, Metrics, and Spatial Analysis Practicum (S2017)
 Doctoral seminar (F2014; F2015; F2016; F2017; F2018)
 Climate Change Mitigation in Urban Areas (F2012; S2014; F2015)
 Linkages of Sustainability (F2009; S2012; S2013)
 Remote Sensing of Land-Use and Land-Cover Change (F2009; F2011; S2014)
 Urbanization, Global Change, and Sustainability (S2009)

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

OUTREACH

Executive Producer, “Ten Thousand Shovels: Rapid Urbanization in China,” short documentary film.

PROFESSIONAL AFFILIATIONS

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