# Curriculum Vitae Xingong Li

Department of Geography and Atmospheric Science
University of Kansas
1475 Jayhawk Blvd
Lawrence, KS 66045 USA
phone: (785) 864-5545
fax: (785) 864-5378
email: lixi@ku.edu

#### Education

Ph.D. Geography, University of South CarolinaM.S. Geography, Nanjing University (China)B.S. Geology, Nanjing University (China)

### **Academic Appointments**

Professor Department of Geography and Atmospheric Science,

2017-present University of Kansas

Associate Professor Department of Geography and Atmospheric Science,

2010-2017 University of Kansas

Assistant Professor Department of Geography,

2003-2010 University of Kansas

Assistant Professor Department of Geography & Planning,

Appalachian State University

**Refereed Publications** (Italics denotes a student or visiting scholar under my advisement and \* indicates corresponding author)

- 1. *Wang, L.M.,* J.X. Wang, L.C. Wang, L.P. Zhu and **X. Li\***, (2023) Lake evaporation and its effects on basin evapotranspiration and lake water storage on the inner Tibetan Plateau, *Water Resources Research*. <a href="http://dx.doi.org/10.1029/2022WR034030">http://dx.doi.org/10.1029/2022WR034030</a>.
- 2. *Wang, J.X.,* **X. Li,** X. Wang, S. Zhou, and Y. Luo (2022) Farmland Quality Assessment Using Deep Fully Convolutional Neural Networks, *Environmental Monitoring and Assessment*, <a href="https://doi.org/10.1007/s10661-022-10848-5">https://doi.org/10.1007/s10661-022-10848-5</a>.
- 3. Wang, J.X., L.M. Wang, M.Y. Li, L.C. Wang, L.P. Zhu and **X. Li\***, (2022) Lake volume variation in the endorheic basin of the Tibetan Plateau from 1989 to 2019, *Scientific Data*. https://doi.org/10.1038/s41597-022-01711-w.
- 4. Wang, L.M., J.X. Wang, M.Y. Li, L.C. Wang and X. Li\*, L.P. Zhu (2022) Response of terrestrial water storage and its change to climate change in the endorheic Tibetan Plateau, *Journal of Hydrology*, https://doi.org/10.1016/j.jhydrol.2022.128231.

- 5. Weekley, D. and X. Li (2022) Maximizing Multi-Decadal Water Surface Elevation Estimates with Landsat Imagery and Elevation/Bathymetry Datasets, Water Resources Research. https://doi.org/10.1029/2021WR029680.
- 6. Wang, L.M., J.X. Wang, L.C. Wang, L.P. Zhu and **X. Li\*** (2022), Terrestrial water storage regime and its change in the endorheic Tibetan Plateau, *Science of the Total Environment*, https://doi.org/10.1016/j.scitotenv.2021.152729.
- 7. Wang, J.X., M.Y. Li, L.M. Wang, J.F. She, L.P. Zhu and X. Li\* (2021) Long-Term Lake Area Change and Its Relationship with Climate in the Endorheic Basins of the Tibetan Plateau, *Remote Sensing*, 13(24), https://doi.org/10.3390/rs13245125.
- 8. *Porter, M.*, M. C. Hill, T. Harris, A. Brookfield, **X. Li** (2021) The DiscoverFramework freeware toolkit for multivariate spatio-temporal environmental data visualization and evaluation, *Environmental Modelling and Software*. https://doi.org/10.1016/j.envsoft.2021.105104.
- 9. *Meisel, J.,* S. Egbert, J. Brewer II and X. Li. (2021) Automated Mapping of Historical Native American Land Allotments at the Standing Rock Sioux Reservation Using Geographic Information Systems, *ISPRS International Journal of Geo-Information*. <a href="https://doi.org/10.3390/ijgi10030183">https://doi.org/10.3390/ijgi10030183</a>.
- 10. Jiménez-García, D., **X. Li**, Lira-Noriega, A., Peterson, A. T. (2021) Upward shifts in elevational limits of forest and grassland for Mexican volcanoes over three decades, *Biotropica*. DOI: 10.1111/btp.12942.
- 11. Weekley, D. and X. Li\* (2020) Tracking Lake Water Elevation with Proportional Hypsometric Relationships, Landsat Imagery and Multiple DEMs, Water Resources Research. https://doi.org/10.1029/2020WR027666
- 12. *Liu, H., Li, X., Meng, T. et al. (2020) Susceptibility mapping of damming landslide based on slope unit using frequency ratio model. Arabian Journal of Geosciences, 13, 790. https://doi.org/10.1007/s12517-020-05689-w*
- 13. Kurt, Sumeyra and X. Li (2020) Potential impacts of sea level rise on coast of Turkey, *Journal of Environment and Earth Science*, 10(5): 40-47. DOI: 10.7176/JEES/10-5-04.
- 14. Chen, Y.Q., J.F. She, X. Li, S.H. Zhang and J.Z. Tan (2020) Accurate and Efficient Calculation of Three-Dimensional Cost Distance, ISPRS International Journal of Geo-Information, 9(6) 10.3390/ijgi9060353.
- 15. *Wang, L.M.*, M.Y. Li, J.X. Wang and **X. Li\*** (2020) An analytical reductionist framework to separate the effects of climate change and human activities on variation in water use efficiency, *Science of the Total Environment*, <a href="https://doi.org/10.1016/j.scitotenv.2020.138306">https://doi.org/10.1016/j.scitotenv.2020.138306</a>.
- 16. Sun, C.J., X.M. Li, W.Q. Zhang and X. Li\* (2020) Evolution of Ecological Security in the Tableland Region of the Chinese Loess Plateau Using a Remote-Sensing-Based Index, Sustainability, 12 (3489), doi:10.3390/su12083489.

- 17. *Li*, *M.Y.*, L.M. Wang, J.X. Wang, X. Li and J.F. She (2020) Comparison of land use classification based on convolutional neural network, *Journal of Applied Remote Sensing*, 14(1), https://doi.org/10.1117/1.JRS.14.016501
- 18. Weekley, D. and X. Li\* (2019) Tracking Multi-Decadal Lake Water Dynamics with Landsat Imagery and Topography/Bathymetry, Water Resources Research, <a href="https://doi.org/10.1029/2019WR025500">https://doi.org/10.1029/2019WR025500</a>.
- 19. Zhang, S., X. Li, and J. She (2019) Error Assessment of Grid-Based Terrain Shading Algorithms for Solar Radiation Modeling over Complex Terrain, *Transactions in GIS*, DOI: 10.1111/tgis.12594.
- 20. Zhang, S., X. Li\*, J. She and X. Peng (2019) Assimilating Remote Sensing Data into GIS-based All Sky Solar Radiation Modeling for Mountain Terrain, *Remote Sensing of Environment*, <a href="https://doi.org/10.1016/j.rse.2019.111239">https://doi.org/10.1016/j.rse.2019.111239</a>.
- 21. Yang, M., X. Yan, X. Zhang, and **X. Li\*** (2019) Constrained trajectory simplification with speed preservation, *Cartography and Geographic Information Science*, <a href="https://doi.org/10.1080/15230406.2019.1618200">https://doi.org/10.1080/15230406.2019.1618200</a>.
- 22. *Sun*, *C.*, Y. Chen, W. Chen and X. Li (2019) Stable isotope variations in precipitation in the northwesternmost Tibetan Plateau related to various meteorological controlling factors, *Atmospheric Research*, 227(1): 66-78
- 23. Cai, Y., C. Ke, X. Li, G. Zhang, Z. Duan, H. Lee (2019) Variations of Lake Ice Phenology on the Tibetan Plateau From 2001 to 2017 Based on MODIS Data, *Journal of Geophysical Research: Atmospheres*, 124(2): 825-843.
- 24. *Coll, J.* and **X. Li\*** (2018) Comprehensive Accuracy Assessment of MODIS Daily Snow Cover Products and Gap Filling Methods, *ISPRS Journal of Photogrammetry and Remote Sensing*, <a href="https://doi.org/10.1016/j.isprsjprs.2018.08.004">https://doi.org/10.1016/j.isprsjprs.2018.08.004</a>.
- 25. *Grady, C. J.* and **X. Li\*** (2018) A distributed approach for calculating inundation height based on Dijkstra's algorithm, *Transactions in GIS*, DOI: 10.1111/tgis.12453.
- 26. **Li, X**. (2017). Buffers. *The Geographic Information Science & Technology Body of Knowledge* (4th Quarter 2017 Edition), John P. Wilson (ed.). DOI: 10.22224/gistbok/2017.4.10
- 27. *Li*, *J.*, **X. Li**\*, and T. Xie (2017) Morphing of building footprints using a turning angle function, *International Journal of Geo-Information*, 6, 173; doi:10.3390/ijgi6060173.
- 28. *She, J.,* Y. Zhou, X. Tan, **X. Li\***, and X. Guo (2017) A parallelized screen-based method for rendering polylines and polygons on terrain surfaces, *Computers & Geosciences*, 99: 19-27, doi: 10.1016/j.cageo.2016.10.011.
- 29. Sun, C., X. Li\*, Y. Chen (2017) Climate change and runoff response in an arid mountain watershed of western Kunlun Mountains, *Hydrological Science Journal*, 62(2), DOI: 10.1080/02626667.2016.1224885.
- 30. *Li*, *H*., **X**. **Li**\*, and P. Xiao (2016) Impact of Sensor Zenith Angle on MOD10A1 Data Reliability and Modification of Snow Cover Data for the Tarim River Basin, *Remote Sensing*, 8, 750, doi:10.3390/rs8090750.

- 31. *Liu*, *W*. and **X. Li\*** (2016) Life cycle characteristics of warm-season severe thunderstorms in central united states from 2010 to 2014, *Climate*, 4(3), 45, doi:10.3390/cli4030045.
- 32. *She, J.* and **X. Li\*** (2016) Map algebra based analysis for directed flow networks, *Transactions in GIS*, 20(3), DOI10.1111/tgis.12234.
- 33. Sun, C., J. Yang, Y. Chen, X. Li, Y. Yang, Y. Zhang (2016) Comparative study of streamflow components in two inland rivers in the Tianshan Mountains, Northwest China, Environmental Earth Sciences. 75(9): 1-14, DOI: 10.1007/s12665-016-5314-1.
- 34. Li, X\*, S. Zhang, Y. Chen (2016) Error assessment of grid-based diffuse solar radiation models, *International Journal of Geographical Information Science*, 30(10), DOI:10.1080/13658816.2016.1155215.
- 35. Liu, W., K. Purdon, T. Stafford, J. Paden, X. Li\* (2016) Open Polar Server (OPS) An Open Source Spatial Data Infrastructure for the Cryosphere Community, ISPRS International Journal of Geo-Information, 5(32), doi:10.3390/ijgi5030032.
- 36. Sun, C., X. Li\*, Y. Chen (2016) Spatial and temporal characteristics of stable isotope in the Tarim River basin, Isotopes in Environmental & Health Studies, 52(3), DOI:10.1080/10256016.2016.1125350.
- 37. Sun, C., Y. Chen, W. Li, X. Li, Y. Yang (2016) Isotopic time-series partitioning of streamflow components under regional climate change in the Urumqi River, northwest China, *Hydrological Sciences Journal*, 61(8), DOI: 10.1080/02626667.2015.1031757.
- 38. *Liu*, *P.*, **X. Li\***, W. Liu, T. Ai (2016) Fourier-based multi-scale representation and progressive transmission of cartographic curves on the Internet, *Cartography and Geographic Information Science*, 43(5), 10.1080/15230406.2015.1088799.
- 39. *Liu*, *W.*, **X. Li\***, D. A. Rahn (2016) Storm event representation and analysis based on a directed spatiotemporal graph model, *International Journal of Geographical Information Science*, 30(5), doi: 10.1080/13658816.2015.1081910.
- 40. *Sun*, *C.*, Y. Chen, **X. Li**, W. Li (2016) Analysis on the stream flow components of the typical inland river, Northwest China, *Hydrological Sciences Journal*, 61(5), DOI: 10.1080/02626667.2014.1000914.
- 41. Zhang, S., X. Li\*, Y. Chen (2015) Error assessment of grid-based direct solar radiation models, *International Journal of Geographical Information Science*, 29(10), doi: 10.1080/13658816.2015.1055273.
- 42. *She, J., Y. Zhang,* **X. Li\***, X. Feng (2015) Spatial and temporal characteristics of snow cover in the Tizinafu watershed of western Kunlun Mountains, *Remote Sensing*, 7(4), 3426-3445; doi: 10.3390/rs70403426.
- 43. *Sun*, *C.*, W. Li, Y. Chen, **X. Li**, Y. Yang, (2015) Isotopic and hydrochemical composition of runoff in the Urumqi River, Tianshan Mountains, China, *Environmental Earth Sciences*, 74(2), DOI 10.1007/s12665-015-4144-x.

- 44. *Sheng, B.,* and **X. Li\***, (2015) Accuracy assessment of TRMM3B43 data in Tarim River Basin, *Arid Land Geography* (in Chinese), 38(4): 703-712.
- 45. Peterson, T.A. and **X. Li** (2015) Niche-based projections of wetlands shifts with marine intrusion from sea level rise: an example analysis for North Carolina, *Environmental Earth Sciences*, 73(4), DOI 10.1007/s12665-014-3498-9.
- 46. Fan, Y., Y. Chen, X. Li, W. Li, and Q. Li (2015) Characteristics of water isotopes and ice-snowmelt quantification in the Tizinafu River, north Kunlun Mountains, Central Asia, *Quaternary International*, 380-381(4), doi:10.1016/j.quaint.2014.05.020.
- 47. Li, X. \*, C. J. Grady, and T. A. Peterson (2014) Delineating Sea Level Rise Inundation Using a Graph Traversal Algorithm, *Marine Geodesy*, 37(2): 267-281, DOI: 10.1080/01490419.2014.902884.
- 48. She, J., Y. Zhang, X. Li\*, and Y. Chen (2014) Changes of Snow and Glacier Cover in an Arid Watershed of Western Kunlun Mountains Using Multisource Remote Sensing Data, International Journal of Remote Sensing, 35(1): 234-251, DOI: 10.1080/01431161.2013.866296.
- 49. Wu, S., S. Zhou, D. Chen, Z. Wei, L. Dai, and X. Li (2014) Determining the contributions of urbanisation and climate change to NPP variations over the last decade in the Yangtze River Delta, China. *Science of the Total Environment*, 472(2): 397-406, DOI: 10.1016/j.scitotenv.2013.10.128.
- 50. Islam, M. Z., S. Menon, **X. Li**, and A. T. Peterson (2013) Forecasting ecological impacts of sea-level rise on coastal conservation areas in India, *Journal of Threatened Taxa*, 5(9): 4349-4358, DOI: 10.11609/JoTT.o3163.4349-58.
- 51. Gali, R. K., K. R. Douglas-Mankin, **X. Li**, and *T. Xu* (2012) Assess NEXRAD P3 data effects using SWAT model in an agricultural watershed, *Journal of Hydraulic Engineering*, 17:1245-1254.
- 52. Fan, Y., Y. Chen, W. Li, H. Wang, X. Li (2011) Impacts of temperature and precipitation on runoff in the Tarim River during the past 50 years *Journal of Arid Land*, 3(3): 220-230.
- 53. Leng, C., Y. Chen, X. Li, Y. SUN (2011) Evaluation of oasis stability in the lower reaches of the Tarim River, *Journal of Arid Land*, 3(2): 123-131.
- 54. Wu, S., S. Zhou, **X. Li** (2011) Determining the anthropogenic contribution of heavy metal accumulations around a typical industrial town: Xushe, China. *Journal of Geochemical Exploration*, 110 (2), 92-97, DOI: 10.1016/j.gexplo.2011.04.002.
- 55. Li, Q., Y. Chen, Y. Shen, and **X. Li**. (2011) Spatial and temporal trends of climate change in Xinjiang, China, *Journal of Geographical Sciences*, 21(6): 1007-1018. DOI: 10.1007/s11442-011-0896-8.
- 56. Peterson, A.T., S. Menon, and **X. Li.** (2010) Recent Advances in the Climate Change Biology Literature: describing the whole elephant, *Interdisciplinary Reviews: Climate Change*, 1(4): 548-555.

- 57. Peterson, A.T., A.G. Navarro-Siguenza, and **X. Li**. (2010) Joint effects of marine intrusion and climate change on the Mexican avifauna, *Annals of the Association of American Geographers*, 100(4): 908-916, DOI: 10.1080/00045608.2010.497351.
- 58. Menon, S., J. Soberon, **X. Li**, and A.T. Peterson. (2010) Preliminary global assessment of terrestrial biodiversity consequences of sea-level rise mediated by climate change, *Journal of Biodiversity and Conservation*, 19(6): 1599-1609, DOI 10.1007/s10531-010-9790-4.
- 59. Wu, S., S. Zhou, X. Li, T. Jackson, Q. Zhu. (2010) An approach to partition the anthropogenic and natural components of heavy metal accumulations in roadside agricultural soil, *Environmental Monitoring and Assessment*, 173(1), DOI 10.1007/s10661-010-1430-7.
- 60. French, K. and X. Li\* (2010) Feature-based cartographic modeling, International Journal of Geographical Information Science. 24(1): 141-164. DOI: 10.1080/13658810802492462.
- 61. Setiadi, M.I., A. Hamidy, Z. Abidin, D. Susanto, R. Brown, A.T. Peterson, **X. Li**, and B.J. Evans. (2010) Genetic structure of herpetofauna on Halmahera Island, Indonesia: implications for the Aketajawe-Lolobata National Park, *Journal of Conservation Biology*. 24(2): 553-562. DOI: 10.1111/j.1523-1739.2009.01384.x.
- 62. Wu, S., S. Zhou, X. Li, W.C. Johnson, H. Zhang, and J. Shi. (2010) Heavy-metal accumulation trends in Yixing, China: an area of rapid economic development, *Environmental Earth Sciences* (formerly *Journal of Environmental Geology*), 61(1), DOI 10.1007/s12665-009-0321-0.
- 63. Tucker, D.F., and **X. Li**. (2009) Characteristics of warm season precipitating storms in the Arkansas-Red River basin, *Journal of Geophysical Research—Atmospheres*, 114(D13), D13108, doi:10.1029/2008JD011093.
- 64. Li, X., R.J. Rowley, J.C. Kostelnick, D. Braaten, J. Meisel, and K. Hulbutta (2009) GIS analysis of global impacts from sea level rise. *Photogrammetric Engineering & Remote Sensing*, 75(7): 807-818.
- 65. Wu, S., S. Zhou, X. Li, H. Zhang, K. Ren, and Q. Zhao (2009) Estimating the anthropogenic fluxes of heavy metal accumulations in roadside agricultural soils. *Fresenius Environmental Bulletin*, 18(7b): 1336-1340.
- 66. **Li, X.** and M. Williams (2008) Snowmelt runoff modeling in an arid mountain watershed, Tarim Basin, China. *Hydrological Processes*, 22(19): 3931-3940.
- 67. Legra, L., **X. Li**, and T. A. Peterson (2008) Biodiversity consequences of sea level rise in New Guinea. *Pacific Conservation Biology*, 14(3): 191-199.
- 68. Rowley, R.J., J.C. Kostelnick, D. Braaten, **X. Li**, and J. Meisel (2007) Risk of rising sea level to population and land area. *Eos, Transactions, American Geophysical Union*, 88(9): 105-107.
- 69. **Li, X.** (2005) Deriving directional variance from covariance matrix. *Transactions in GIS*, 9(3): 443-445.
- 70. Li, X., C. Larson, and A. Rex (2005) Creating buffers on surfaces. Cartography and Geographical Information Science, 32(3): 195-210.

- 71. Li, X., S. Wang, and M. Harman (2005) Improved lake/reservoir water quality modeling using an environmental model and GIS. GIScience & Remote Sensing, 42(4): 320-332.
- 72. Li, X. and M. Hodgson (2004) Vector field data model and operations. GIScience & Remote Sensing, 41(1): 1-24.
- 73. Hodgson, M., **X. Li**, and Y. Chen (2004) A parameterization model for transportation feature extraction. *Photogrammetric Engineering & Remote Sensing*, 70(12): 1399-1404.
- 74. Lin, H., Q. Wan, **X. Li**, J. Chen, and Y. Kong (1997) GIS-based multi-criteria evaluation support system for investment, *Environment Management and Planning B*, 24(2): 403-414.
- 75. **Li, X.** and T. Chi (1995) The design and implementation of a feature-oriented GIS. *Remote Sensing Technology and Applications*. 10(4): 65-70. (in Chinese)
- 76. Li, X., F. Qiu, and S. Zhan (1995) Application of GPS and GIS in vehicle real-time monitoring. *Remote Sensing Technology and Applications*, 10(2): 33-37. (in Chinese)
- 77. Wu, B., M. Zhang, and **X. Li** (1994) Development of GIS. *Acta Geographical Sinica*. 49(8): 632-640. (in Chinese)

### **Other Publications**

- 1. **Li, X**. (2010) Map algebra, in *Encyclopedia of Geography* (Ed. B. Warf), SAGE Publications, 1824-1825.
- 2. Li, X. and T. Xu (2008) Using NEXRAD Precipitation in AnnAGNPS, Software and Technical Report to USDA, 28 pages.
- 3. Harman, M., X. Li, and S. Wang (2004) GIS extension for BATHTUB—software and user manual. *Kansas Biological Survey Publication No.* 122, 35 pages.
- 4. **Li, X.** (1998) Distributed storm runoff modeling using GIS. *Proceedings of GIS/LIS'98 Annual Conference*, Fort Worth, Taxes, pp: 68-75
- 5. **Li, X.** (1997) Development of neural network spatial interpolator for precipitation estimation. *Proceedings of GIS/LIS'97 Annual Conference,* Cincinnati, Ohio. pp: 653-662.

## **Scholarly Presentations**

- 1. X. Li, D. Weiss, J. Kastens, K. Ekpetere, J. Colls, J. Halgren, J. Song *Operational Flood Inundation Mapping in Kansas*, San Francisco, USA, December 2023
- 2. X. Li, J. Kastens, K. Ekpetere, J. Colls, J. Halgren, *Real-Time Flood Inundation Mapping in Kansas*, Denver, CO, USA, March 2023.
- 3. Chen, Y., J. She, X. Li, Calculate Accurate 3D Cost Distance Efficiently, *International Cartographic Conference*, Tokyo, Japan, July 2019.

- 4. Li, X., D. Tarboton, M. Hodgson, S. Wang, A Map Algebra Approach to Analyzing Time Series of Rasters, *CUAHSI Conference on HydroInformatics*, Brigham Young University, Provo, Utah, July 2019.
- 5. Li, X., D. Tarboton, M. Hodgson, S. Wang, E. Shook, A Map Algebra Approach to Analyzing Spatiotemporal Data, *Association of American Geographers Annual Meeting*, Washington DC, April 2019.
- 6. Li, X., Spatiotemporal Map Algebra: a framework for big geospatial data analysis, *NSF Workshop on Geospatial Software Institute*, University of Southern California, c, January 2018.
- 7. Li, X. and J. Coll, Global Snow Cover Trend Analysis using Cloud-based Geospatial Analysis Engine, 2017 *ASPRS Pecora* 20, Sioux Falls, ND, November 2017.
- 8. Li, X., Snow and Ice Cover Change: from Local to Global, Institute of Tibetan Plateau Research, Chinese Academy of Sciences, Beijing, China, October, 2017 (invited)
- 9. Li, X. and CJ Grady, Parallelizing Inundation Height Calculation, *CUAHSI Conference on Hydroinfomatics*, Tuscaloosa, AL, July 2017.
- 10. Li, X., GIS in the Era of Big Geospatial Data, School of Geography and Ocean Science, Nanjing University, Nanjing, China, June, 2017 (invited)
- 11. J. Glaubius and X. Li, Disentangling Human and Environmental Factors in the Evolution of Terraced Landscapes: A Modeling Approach, 2017 AAG Boston, MA.
- 12. Li, X. and J. Coll, Building a Cloud-based Global Snow Observatory, *American Geophysical Union (AGU) Fall Meeting*, San Francisco, December 2016.
- 13. Li, X., Modeling Solar Radiation through Cloud Computing. *The 17<sup>th</sup> International Conference on Spatial Data handling*, Beijing, August 2016.
- 14. Li, X., Modeling Solar Radiation through Cloud Computing. NSF Workshop on Geospatial Data Science in the Era of Big Data and CyberGIS, UIUC, IL, July 2016.
- 15. Li, X., & Liu, W., Understanding Spatiotemporal Processes through Multivariate Statistics and Event Exploration. *The 2016 University Consortium for Geographic Information Science (UCGIS) Symposium*, Phoenix, AZ, May 2016.
- 16. Li, X. and T. Slocum, CyberGIS Curriculum at the University of Kansas, AAG and *NSF CyberGIS Curriculum Workshop*, San Francisco, April 2016.
- 17. Coll, J. and X. Li, Comprehensive Assessment on MODIS Daily Snow Cover Products and Gap-filling Methods, *Association of American Geographers Annual Meeting*, San Francisco, California, March 2016.
- 18. Coll, J. and X. Li, Global Snow Cover Change Analysis Using Google Earth Engine Summer Summit, San Francisco, June 2015.
- 19. Glaubius, J. and X. Li, Coupled Human and Natural Systems: Testing the Impact of Agricultural Terraces on Landscape Evolution. *Community Surface Dynamics Modeling System Annual Meeting*, Boulder, June 2015.
- 20. Li, X. and J. Coll, Global Snow Cover Change Analysis Using Google Earth Engine. *China National Snow Mapping Conference*, Nanjing, China, May 2015 (invited).

- 21. Li, X. and J. Coll, Global Snow Cover Change Analysis Using Google Earth Engine. *Lanzhou University*, Lanzhou, China, May 2015 (invited).
- 22. Li, X. Change of Snow and Glacier in an Arid Mountain Watershed in Western China. *Johnson County Community College*, Overland Park, Kansas, April 2015 (invited).
- 23. Glaubius, J. and X. Li, Simulating the Evolution of Terraced Terrain with a Landscape Evolution Model Coupled With an Agent-based Model. *Association of American Geographers Annual Meeting*, Chicago, April 2015.
- 24. Coll, J. and X. Li, Global Analysis of Snow Cover Trends Using MODIS and Google Earth Engine. *Annual Meeting of American Association of Geographers*, Chicago, April 2015.
- 25. Coll, J. and X. Li Introduction to Google Earth Engine Workshop. *Annual Meeting of American Association of Geographers*, Chicago, April 2015.
- 26. Liu, W. and X. Li, A Spatiotemporal Graph Model for Rainfall Event Identification and Representation. *Annual Meeting of American Association of Geographers*, Tampa, Florida, April 2014.
- 27. Slocum, T. and X. Li, Teaching mapping and analysis in the cloud. *The Second International Conference on CyberGIS and GeoDesign*, Redlands, California, August 2014.
- 28. Li, X., Change of Snow and Glacier in the Tizinafu Watershed in Western Kunlun Mountains. *CGIS Global Food for Thought*, University of Kansas, Lawrence, Kansas, April 2014 (invited).
- 29. W. Liu and X. Li, Event identification, representation, and exploration in hydrometrological spatiotemporal data, *University Consortium for Geographic Information Science (UCGIS) Symposium*, George Mason University, Fairfax, VA, May 2013.
- 30. Li, X., J. She, L. Usery, J. Simley, Web-based Network Neighborhood Analyst for the NHD, *AWRA Spring Specialty Conference-GIS and Water Resources VII*, New Orleans, Louisiana, March 2012
- 31. Li, X., Comparison of GIS-based sea level rise inundation delineation methods, *Annual Meeting of American Association of Geographers*, Seattle, April 2011.
- 32. Li, X., Map algebra and event-based precipitation data analysis, *LREIS*, *Chinese Academy of Sciences*, Beijing, China, November 2010.
- 33. Li, X., GIS and its applications in water resources management, *Nanjing University*, Nanjing, China, June 2010.
- 34. Li, X., GIS and its applications in water resources management, *Zhenzhou University*, Zhengzhou, China, June 2010.
- 35. Li, X., Impacts from sea level rises, *Zhongshan University*, Guangzhou, China, June 2010.
- 36. Tucker, D. and X. Li., Warm season precipitating storms in the southern great plains, *AAG GPRM meeting*, Lawrence, October 2010.

- 37. Li, X., Delineating potentially inundated areas from sea level rise with tiled DEMs, *Annual Meeting of American Association of Geographers*, Washington D.C., April 2010.
- 38. Bentlage, B., A.T. Peterson, X. Li, A.G. Collins, and P. Cartwright, Biogeography of open ocean jellyfishes: integrating ecological niche modeling and phylogeography in a 3D environment, *The 10th International Congress of Ecology (INTECOL)*, Brisbane, Australia, August 2009.
- 39. Li, X., Snow-/glacier-melt water in southern Xinjiang, China, Conference of the opening of western China: problems and prospects, University of Kansas, Lawrence, April 2009 (invited).
- 40. Li, X. and D. Tucker, Precipitation events—their spatio-temporal characteristics and movement, *Annual Meeting of American Association of Geographers*, Las Vegas, March 2009.
- 41. Tucker, D. and X. Li, Climatology of warm season precipitating storms in the southern Great Plains, *AMS Annual Meeting*, Phoenix, January 2009.
- 42. Tucker, D. and X. Li, Distribution of Warm Season Precipitating Storms in the Southern Great Plains, *AGU Fall Meeting*, San Francisco, December 2008.
- 43. Li, X., Snowmelt runoff modeling in the Yarkant river basin, *International Workshop of Glaciers in Watershed and Global Hydrology*, Obergurgl, Austria, September 2007.
- 44. Li, X., GIS Tools for Visualizing and Analyzing the NEXRAD Precipitation Data, *Annual Meeting of American Association of Geographers*, Boston, April 2007.
- 45. Li, X., R.J. Rowley, J.C. Kostelnick, D. Braaten, J. Meisel, and K Hulbutta, GIS Analysis of Global Inundation Impacts from Sea Level Rise, *Annual Meeting of American Association of Geographers*, San Francisco, March 2006.
- 46. Li, X., Creating buffers on topographic surfaces, *Annual Meeting of American Association of Geographers*, Denver, March 2005.
- 47. Li, X., Wind Farm Siting Using GIS in Western North Carolina, ASPRS Annual Meeting, Denver, May 2004.
- 48. Li, X., Viewshed Characterization for Wind Farm Siting in Western North Carolina, *Twenty-fourth annual ESRI international user conference*, San Diego, August 2004.
- 49. Li, X., Integrating Analytic Hierarchy Process with GIS through the COM technology, *ASPRS Annual Meeting*, Washington D.C., April 2002.
- 50. Li, X., Data model and operations for vector fields, *The First International Conference on Geographic Information Science*, Savannah, October 2000.
- 51. Hodgson, M. and X. Li, Shortest path considering the direction of movement, *ASPRS Annual Meeting*, Portland, May 1999.
- 52. Hodgson, M. and X. Li, Sensitivity analysis on feature extraction algorithm, *ASPRS Annual Meeting*, Tampa, April 1998.
- 53. Carbone, G., R. Lloyd, R. Bunch, and Li, X., Comparison of different interpolation techniques with monthly precipitation data, *Annual Meeting of American Association of Geographers*, Boston, March 1998.

54. Li, X., Digital road map for vehicle navigation, International Symposium of Geoinfomatics'95 Hong Kong: RS, GIS and GPS in sustainable development and environmental monitoring, Hong Kong, May 1995.

#### **Research Grants**

- 1. Remote sensing vegetation survey, **Co-PI**, TriHydro Corporation, \$150,000 (6/1/2023 12/31/2024).
- 2. Strengthening People and Revitalizing Kansas (SPARK) equipment fund for Kansas real-time flood mapping tool development, **Co-PI**, \$50,000 (1/2/2023 12/31/2023).
- 3. Kansas Real-Time Flood Mapping Tool Development (phase 4), **Co-PI**, Kansas Water Office, \$60,000 (1/2/2023 12/31/2023).
- 4. Kansas Real-Time Flood Mapping Tool Development (phase 3), **Co-PI**, Kansas Water Office, \$40,000 (1/2/2022 12/31/2022).
- 5. Kansas Real-Time Flood Mapping Tool Development (phase 2), **Co-PI**, Kansas Water Office, \$40,000 (1/2/2021 12/31/2021).
- 6. FOSSFlood: The LivingFlood Application Built on Free Open Source Software, **PI**, NOAA, \$15,000, 04/01/2018-08/31/2019.
- 7. Trend of snow and ice cover in mountainous areas, **PI**, Google Inc., \$42,000, 09/01/2014-08/31/2015.
- 8. CyberGIS Fellowship, **Co-PI**, *NSF*, \$7,400, 09/2014 05/2015.
- 9. Geospatial analysis Web services for The National Map, **PI**, *USGS*, \$63,413, 1/2/2011-6/30/2011.
- 10. Sea level rise effects on coastal ecosystem distributions and biodiversity status in the U.S. Middle Atlantic region, **PI**, US Department of Energy, \$125,000, 07/01/09 10/31/11.
- 11. NSF Science and Technology Center: Center for Remote Sensing of Ice Sheets, **Participating Faculty**, *NSF*, \$19,000,000, 08/01/2005--07/31/2015.
- 12. IGERT: C-CHANGE: Climate Change, Humans, and Nature in the Global Environment, **Participating Faculty**, *NSF*, \$3,200,000, 2008 2013.
- 13. Geographic and cartographic assistance to the Geneva International Centre for Humanitarian Demining, Co-PI, Geneva International Centre for Humanitarian Demining, \$80,000, 3/15/09-12/31/09.
- 14. Snowmelt runoff modeling in the Sierra-Nevada watersheds, **PI**, *University of Kansas Faculty General Research Fund*, \$7409, 07/01/2008—06/30/2009.
- 15. Developing NEXRAD-based precipitation datasets for the Cheney Lake watershed for use in water quality models, **PI**, *US Department of Agriculture*, \$19,685, 05/01/2007 01/31/2008.
- 16. Conservation Evaluation and Assessment Project for the Cheney Reservoir Watershed, **PI**, *US Department of Agriculture*, \$18,000, 09/01/2005 05/31/2006.

- 17. Understanding snow and glacier runoff processes in an arid mountain watershed, **PI**, *University of Kansas Faculty General Research Fund*, \$4,438, 07/01/2005—06/30/2006.
- 18. Developing a GIS Extension for Lake Water Quality Model BATHTUB, **PI**, *US Environment Protection Agency*, \$15,000, 06/01/2004—12/31/2004.
- 19. Multi-resolution representation and analysis of vector GIS data, **PI**, *University of Kansas New Faculty General Research Fund*, \$7,964, 07/01/2003 06/30/2004.

### **Professional Affiliations**

American Geophysical Union (AGU)
The Imaging and Geospatial Information Society (ASPRS)
Association of American Geographers (AAG)