

BIOGRAPHICAL SKETCH

DESHENG LIU

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(a) PROFESSIONAL PREPARATION

Wuhan University, Wuhan, China	Geographic Information Science	B.E. 2001
University of California, Berkeley, CA	Environmental Science	M.S. 2003
University of California, Berkeley, CA	Statistics	M.A. 2004
University of California, Berkeley, CA	Environmental Science	Ph.D. 2006

(b) APPOINTMENTS

2018– present	Professor, Department of Geography, Department of Statistics (by courtesy), Department of Civil, Environmental, Geodetic Engineering (by courtesy), The Ohio State University (OSU)
2018 – present	Faculty Member, Principle Investigator, Byrd Polar and Climate Research Center, OSU
2012 – present	Faculty Member, Environmental Science Graduate Program, OSU
2013 – 2018	Associate Professor, Department of Geography and Department of Statistics (by courtesy), OSU
2012 – 2013	Associate Professor, Department of Geography (75% FTE) and Department of Statistics (25% FTE), OSU
2006 – 2012	Assistant Professor, Department of Geography (75% FTE) and Department of Statistics (25% FTE), OSU

(c) PRODUCTS

(i) Five Most Relevant

- Zhu, X., E.H. Helmer, F. Gao, D. Liu, J. Chen, and M.A. Lefsky. 2016. A flexible spatiotemporal method for fusing satellite images with different resolutions. *Remote Sensing of Environment* 172:165-177.
- Zhu, X. and D. Liu. 2015. Improving forest aboveground biomass estimation using seasonal Landsat NDVI time-series. *ISPRS Journal of Photogrammetry and Remote Sensing* 102: 222-231.
- Cai, S., D. Liu, D. Sulla-Menashe, and M. Friedl. 2014. Enhancing MODIS land cover product with a spatial-temporal modeling algorithm. *Remote Sensing of Environment* 147: 243-255.
- Liu, D. and S. Cai. 2012. A spatial-temporal modeling approach to reconstructing land-cover change trajectories from multi-temporal satellite imagery. *Annals of the Association of American Geographers* 102(6): 1329-1347.
- Liu, D., K. Song, J.R. Townshend, and P. Gong. 2008. Using local transition probability models in Markov random fields for forest change detection. *Remote Sensing of Environment* 112(5): 2222-2231.

(ii) *Other Relevant Products*

Cai, S. and D. Liu. 2018. Mapping land cover change trajectories with monthly MODIS time series from 2001 to 2010. *Remote Sensing: Time Series Image Processing*. Qihao Weng (eds). CRC Press/Taylor & Francis Group.

Wehmann, A. and D. Liu. 2015. A spatial-temporal contextual Markovian kernel method for multi-temporal land cover mapping. *ISPRS Journal of Photogrammetry and Remote Sensing* 107: 77-89.

Cai, S. and D. Liu. 2015. Detecting change dates from dense satellite time series using a sub-annual change detection algorithm. *Remote Sensing* 7:8705-8727.

Zhu, X. and D. Liu. 2014. Accurate mapping of forest types using dense seasonal Landsat time-series. *ISPRS Journal of Photogrammetry and Remote Sensing* 96: 1-11.

Zhu, X., D. Liu, and J. Chen. 2012. A new geostatistical approach for filling gaps in Landsat ETM+ SLC-off images. *Remote Sensing of Environment* 124: 49-60.

(d) SELECTED SYNERGISTIC ACTIVITIES

- Associate Editor, *Annals of GIS; Photogrammetric Engineering and Remote Sensing*.
- Editorial Board Member, *International Journal of Remote Sensing; GIScience & Remote Sensing*.
- Grant Panelist for *NSF, NASA, CASIS, and AAAS*.
- Co-developer of two computational algorithms: *Landsat thick cloud removal* and *Landsat ETM+ gap filling*, publicly available for research and educational applications.
- Invited Instructor, 3-day Short Course on *Spatial Data Analysis for Public Health*, Centers for Disease Control and Prevention (CDC), Atlanta, GA, 2012.
- Organizer, *Workshop on Spatial Statistics for Population and Health Research*, OSU, 2011.
- Invited Participant, *International Workshop on Global Land Cover Mapping*, 2011.
- Organizer, *Workshop on Remote Sensing Applications in Social and Environmental Changes*, OSU, 2010.
- Invited Participant, *Opening Workshop for the SAMSI Program on Space-time Analysis for Environmental Mapping, Epidemiology and Climate Change*, SAMSI, 2009.
- Invited Participant, *SWOT Hydrology Workshop*, 2008.
- Robert N. Colwell Memorial Fellowship, American Society for Photogrammetry and Remote Sensing, 2006.
- Earth System Science Fellow, National Aeronautical and Space Administration, 2003.