SOE W. MYINT **(Curriculum Vitae)**
Dept. of Geography and Environmental Studies, Texas State University
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Education

Ph.D.	Geography (GIScience), Louisiana State University
M.S.	Environmental Remote Sensing and Geoinformation for Development, Asian Institute of Technology
Post-Grad. Diploma	Forest Survey (Aerospace Remote Sensing Techniques), International Institute for Aerospace Survey and Earth Sciences (ITC), the Netherlands
B.S.	Forestry, Rangoon University

APPOINTMENTS

2023-present:	Meadows Endowed Chair Professor, Dept of Geography and Environmental Studies, Texas State University
2024-present:	Honorary Professor of International Studies, College of Liberal Arts, Texas State University
2023-present:	Chief Conservation Officer, The Meadows Center for Water and the Environment
2019-2020	Fulbright Canada Research Chair in Water, Environment, and Clean Energy, Fulbright
2013-2022:	Professor, School of Geographical Sciences and Urban Planning, Arizona State University
2008-2013:	Associate Professor, School of Geographical Sciences and Urban Planning, Arizona State University
2005-2008:	Assistant Professor Department of Geography, Arizona State University
2001-2005:	Assistant Professor, Department of Geography, University of Oklahoma
1992-1998:	Research Specialist, United Nations Environment Program – Environment Assessment Program for Asia and the Pacific (UNEP/EAP-AP)
1983-1992:	Forest Officer, National Forest Management and Inventory project (UNDP/FAO)

Awards and Honors

(1) Top 2% of the World's most influential scientists. Consistently honored as one of the World's top 2% most influential scientists in their respected research categories since the first statistics were compiled for the year 2017 in 2019 (Stanford University/Elsevier Data Repository (2017 – 2025) - https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/7

(2) AAG Fellow, elected by the American Association of Geographers (AAG), 2025.

(3) E. Willard and Ruby S. Miller Award, awarded by the American Association of Geographers (AAG) (selected as the award winner in 2024). This annual award recognizes members of the Association who have made truly

outstanding contributions to the geographic field due to their special competence in research.

(4) John R. Jensen distinguished lecture, American Association of Geographers (AAG) – Remote Sensing Specialty Group (RSSG), 2024. The Jensen Distinguished Lecture Series is a momentous event sponsored by RSSG during AAG Annual Meeting. Established in 2016, the Lecture Series aims to invite the preeminent scholars to share their unique perspective and expertise with the broader RSSG community, including identification of larger trends, challenges, and opportunities within their area of expertise.

(5) Keynote speaker, Engineering and Business Seminar, North American Burmese Engineers Association (NABEA), October 5, 2024, Houston,

(6) Fulbright Canada Research Chair in Water, Environment, and Clean Energy (2019-2020).

(7) Keynote speaker, 2019 conference banquet of the Canadian Association of Geographers' Prairie Division (Sept. 27-29, 2019).

(8) Graduation speech delivered at the 129th Asian Institute of Technology (AIT) Graduation Ceremony on May 18, 2018 - https://www.youtube.com/watch?v=-un1liwqPRo.

(9) Member, European Union Academy of Sciences (EUAS), 2018-2021.

(10) Outstanding Paper in Landscape Ecology, 2017 (Co-author). United States International Association for Landscape Ecology, US-IALE annual meeting, Baltimore.

(11) Outstanding Achievement Award (2016), American Association of Geographers (AAG) - Remote Sensing Specialty Group (RSSG). According to AAG-RSSG, this Award is the most prestigious award for established remote sensing scholars at AAG.

(12) Prominent Alumnus of AIT - Received the title of Prominent Alumnus of Asian Institute of Technology (AIT), http://alumniaffairs.ait.ac.th/prominent-alumni/.

(13) 2015 Best Imported Book Award given by the China Press Association – Chinese version of the book titled "*Advances in Mapping from Aerospace Imagery: Techniques and Applications"* My chapter contribution: Myint, S.W., 2012. The effects of the spatial pattern of vegetation cover on urban warming in a desert city, *Advances in Mapping from Aerospace Imagery: Techniques and Applications* (Editors X. Yang and J. Li), Taylor and Francis Group, LLC, pp 261-278.

(14) Success Story - Among those awarded as Prominent Alumni, my biography was published under 'Success Stories' of the Asian Institute of Technology (AIT) Alumni Association, http://www.aitalumni.com/success-stories-view/10.

(15) Nominated for the Zebulon Pearce Distinguished Teaching Award (given to tenured and tenure-track faculty members), 2017.

(16) Honored Guest (2009) College of Liberal Arts and Sciences Convocation ceremony, for making difference in multiple undergraduate students' education, Arizona State University.

(17) ASPRS Conference Management Award (2010) Recipient. Received at the 2010 American Society for Photogrammetry and Remote Sensing (ASPRS) annual conference in San Diego (April 26-30, 2010). The intent of this award is to recognize the great effort put forth by the individuals who volunteer their time to assist in the planning and execution of a successful annual conference.

(18) AITAA Distinguished Alumni Award (2007) for Academic and Research Excellence, Asian Institute of Technology.
(19) Best Paper Award for Early Career Scholars in Remote Sensing (2007), American Association of Geographers (AAG) - Remote Sensing Specialty Group (RSSG)
(20) CPGIS Scholar, 2005, selected by the Chinese Professionals in Geographic Information Science Abroad (CPGIS) to give lectures and research presentations at Jiangxi Normal University, Nanchang University, and Hubei University as part of the CPGIS Young Scholar Summit.
(21) CSISS Scholarship (Center for Spatially Integrated Social Science) to attend 2003 Geographically Weighted Regression workshop, University of California, Santa Barbara.
(22) Intergraph Young Scholar Award (UCGIS), 2002 UCGIS Summer Assembly, University of Georgia, Athens.
(23) USGS Scholar Award, First International Conference on GIScience, 2000, Savannah, GA, USA.
(24) Consultant (GIS) to World Health Organization (WHO), Geneva, Switzerland (1999) (while studying as a Ph.D. student).
(25) Best Student Paper Award (2001), American Association of Geographers (AAG) - Remote Sensing Specialty Group (RSSG).
(26) Best Student Paper Award – American Society for Photogrammetry and Remote Sensing (ASPRS) – Mid-South Region Meeting at Clemson University, South Carolina, 2000.
(27) Best Student Paper Award (UCGIS-2000), 2000 UCGIS Summer Assembly, Portland, Oregon. Forty-two GIS/RS Graduate students from different Disciplines/Departments and Universities across the United States participated in the competition.
(28) Best Poster Presentation Award, 1998 - 18th Asian Conference on Remote Sensing, Kuala Lumpur, Malaysia.
(29) Otis Paul Starkey Dissertation Research Award (2001), American Association of Geographers.
(30) William G. Haag Award (2001). Most outstanding paper in professional meetings, Dept. of Geography & Anthropology, LSU.
(31) Best Student Paper Award (2^{nd} place), 2000 South Western Division AAG meeting, Texas A&M University.
(32) Best Student Paper Award (2^{nd} place), 1999 South Western Division AAG meeting at Texas State University, San Marcos.
(33) Robert C. West Field Research Award (November, 2000). Department of Geography and Anthropology, LSU.
(34) Student Oral Paper Presentation Award and Travel Award, UCGIS-2000. UCGIS Summer Assembly, Portland, Oregon.
(35) Scholars Enhanced Assistantship Award and Tuition Award (Graduate School), (9,000 US$, 1999 - 2001), LSU (1999 - 2001).
(36) Graduate School Travel Awards (3 awards): Graduate School, Louisiana State University [(October, 1999), (April, 2000), (October, 2000)].

(37) Best Student Award, 87th Public Service Officers Training Course (No. 87), Public Service Selection and Training Board, Myanmar, 1987.
(38) Best Student Award, Basic Officer Training Course No.1 – Myanmar Timber Enterprise, Ministry of Forestry, Myanmar, 1986.
(39) Netherlands Government's Fellowship, Post Graduate Diploma studies at ITC, the Netherlands (1988 - 1989).
(40) French Government Scholarship, M.S. - Asian Institute of Technology, Bangkok (1993 - 1994).

Publications

2025

Heidari, B., Myint, S.W., Zhu, Y., 2025. Examining environmental stress changes in response to climate change and land use dynamics in the Colorado River Basin over the past two decades, Sustainable Futures, Volume 10, 2025, 101427, ISSN 2666-1888, https://doi.org/10.1016/j.sftr.2025.101427.

Zhu, Y., Myint, S.W., Chen, J., Fan, P., Seto, K., Jain, A. K., Qi, J,. & Jin, W., 2025. Thermal changes along the urban-rural continuums in Southeast Asia. *Environmental Research Letters*. https://doi.org/10.1088/1748-9326/adcad2.

Wang, P., Yuan, Y., & Myint, S. W., 2025. Developing mobility zones based on heat exposure and vegetation condition: a tale of two transportation modes. *International Journal of Digital Earth*, *18*(2). https://doi.org/10.1080/17538947.2025.2552878.

Zhu, Y., Myint, S.W., Cao, J., Liu, K., Zeng, M., and Diao, C., 2025. Evaluating multitemporal vegetation indices from Zhuhai-1 hyperspectral images for detecting a rapidly spreading invasive species - *Spartina alterniflora*. Ecological Informatics. https://doi.org/10.1016/j.ecoinf.2025.103208.

Gu, X., Han, S. Y., Myint, S. W., Cho, E., Zhu, Y., & Kim, J. (2025). Exploring Dynamic Human Mobility of Diverse Social Groups Under Heat Conditions: A Simulation-Based Approach. I-GUIDE Forum 2025: Geospatial AI and Innovation for Sustainability Solutions, Conference Proceedings, https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1039&context=iguide.

Zhu, Y., Myint, S.W., Schaffer-Smith, D., Tong, D., Zhou, Y., Li, Y., & Muenich, R.L., 2025. Rising environmental inequalities and their relationship to racial and socioeconomic disparities in the US Southwest, *Environmental Science & Technology*.2025 Aug 26;59(33):17534-17544. doi: 10.1021/acs.est.4c14369.

2024

Shi, D., Song, J., Zhong, Q., Myint, S. W., Zeng, P., & Che, Y. (2024). Cooling wisdom of 'water towns': How urban river network scan shape city climate? *Remote Sensing of Environment*, *300*, 113925, https://doi.org/10.1016/j.rse.2023.113925.

Zhu, Y., Murugesan, S. B., Masara, I. K., Myint, S. W., & Fisher, J. B. (2024). Examining wildfire dynamics using ECOSTRESS data with machine learning approaches: the case of South-Eastern Australia's black summer. *Remote Sensing in Ecology and Conservation*. 05 November 2024, https://doi.org/10.1002/rse2.422

Liu, K., Zhu, Y., Dang, X., Myint, S. W., Liu, L., & Cao, J. (2024). Examining spatial dynamics and interactions of planted alien, native, and invasive alien species in China's largest artificial mangrove forest. Forest Ecology and Management, 556, 121755. https://doi.org/10.1016/j.foreco.2024.121755.

Zhu, Y., Myint, S.W., Liu, K., Lin, L., Cao, J. (2024). Integration of UAV LiDAR and WorldView-2 images for modeling mangrove aboveground biomass with GA-ANN wrapper. Ecological Processes, **13**, 85. https://doi.org/10.1186/s13717-024-00566-w.

Myint, S. (2024). Fundamentals of Aerial Photo Interpretation. The Geographic Information Science & Technology Body of Knowledge – UCGIS (2023 Version), John P. Wilson (Ed.). DOI:10.22224/gistbok/2024.1.4.

2023

Zhu, Y., S.W. Myint, X. Feng, and Y. Li, 2023. An innovative scheme to confront the trade-off between water conservation and heat alleviation with environmental justice for urban sustainability: The case of Phoenix, Arizona. AGU Advances, 4, e2022AV000816. https://doi.org/10.1029/2022AV000816 (selected by the AGU for featuring on Eos.org here as the Editor's Highlight. Fewer than 2 percent of papers are selected to be featured by the AGU).

Schaffer-Smith, D., DeMeester, J. E., Tong, D., Myint, S. W., Libera, D. A., & Muenich, R. L. (2023). Landscape pollution source dynamics highlight priority locations for basin-scale interventions to protect water quality under hydroclimatic variability. Earth's Future, 11, e2022EF003137. https://doi.org/10.1029/2022EF003137.

Zhou, X., and S. W. Myint, 2023. Shadow Pattern-enhanced Building Height Extraction Using Very-High-Resolution Image, *IEEE* Journal of Selected Topics in Applied Earth Observations and Remote Sensing, (16) 180-190, DOI: 10.1109/JSTARS.2022.3221146.

2022

Tran, T.V., D. Bruce, C. Huang, D.X. Tran, S.W. Myint, D.B. Nguyen, 2022. Decadal Assessment of Agricultural Drought in the Context of Land Use and Land Cover Change using MODIS Multivariate Spectral Index Time-series Data, GIScience and Remote Sensing, Vol. 60, NO. 1, 2163070 https://doi.org/10.1080/15481603.2022.2163070.

Zhu, Y., S.W. Myint, D. Schaffer-Smith, D.J. Sauchyn, X. Xu, J.M. Piwowar, and Y. Li, 2022. Examining ground and surface water changes in response to environmental variables, land use dynamics, and socioeconomic changes in Canada, Journal of Environmental Management, 322 (15 November 2022), 115875, https://doi.org/10.1016/j.jenvman.2022.115875.

Fan, P., J. Chen; C. Fung, Z. Naing, Z. Ouyang, K.M. Nyunt; Z.N. Myint, J. Qi; J.P. Messina, S.W. Myint; B.G. Peter, 2022. Urbanization, economic development, and environmental changes in transitional economies in the Global South: A case of Yangon, Ecological Processes, 11:65 https://doi.org/10.1186/s13717-022-00409-6.

Estoque, R.C., R. Dasgupta, K. Winkler, V. Avitabile, Brian A. Johnson, S.W. Myint, Y. Gao, M. Ooba, Y. Murayama, R.D. Lasco, 2022. Spatiotemporal pattern of global forest change over the past 60 years and the forest transition theory, Environmental Research Letters, 17 (2022) 084022.

Li, Y., D. Schaffer-Smith, S.W. Myint, Y. Zhu, 2022. Monitoring ecological and environmental stress patterns over the past two decades in the Mekong River basin, GIScience and Remote Sensing, 59:1, 1817-1836, DOI: 10.1080/15481603.2022.2139387.

Fan, P., J. Chen, C. Fung, Z. Naing, Z. Ouyang, K.M. Nyunt, Z.N. Myint, J. Qi, J.P. Messina, S.W. Myint, and B.G. Peter, 2022. Urbanization, economic development, and environmental changes in transitional economies in the global south: a case of Yangon, Ecological Processes, (2022)11:65: https://doi.org/10.1186/s13717-022-00409-6.

Zhu, Y., S.W. Myint, D. Schaffer-Smith, R.L. Muenich, D. Tong, Y. Li, 2022. Formulating operational mitigation options and examining intra-urban social inequality using evidence-based urban warming effects, Frontiers in Environmental Science, 9:795474. https://doi.org/10.3389/fenvs.2021.795474.

Zhang, Y., G. Chen, S.W. Myint, Y. Zhou, G.J. Hay, J. Vukomanovic, R.K. Meentemeyer, 2022. UrbanWatch: A 1-meter resolution land cover and land use database for 22 major cities in the United States, Remote Sensing of Environment, 278, 113106, https://doi.org/10.1016/j.rse.2022.113106.

2021

Myint, S.W., Aggarwal, R., Zheng, B.;Wentz, E.A.; Holway, J., Fan, C.; Selover, N.J., Wang, C., Fischer, H.A. 2021. Adaptive Crop Management under Climate Uncertainty: Changing the Game for Sustainable Water Use. Atmosphere 2021, 12, 1080. https://doi.org/10.3390/atmos12081080.

Miralha, L., R.L. Muenich, D. Schaffer-Smith, and S.W. Myint, 2021. Spatiotemporal Land Use Change and Environmental Degradation Surrounding CAFOs in Michigan and North Carolina, Science of the Total Environment, 800, 149391.

Fu, P., L. Hu, E.A. Ainsworth, X. Tai, S.W. Myint, W. Zhan, B.J. Blakely, C.J. Bernacchi, 2021. Enhanced drought resistance of vegetation growth in cities due to urban heat and CO_2 domes and O_3 troughs, Environmental Research Letters, 16, 124052, https://doi.org/10.1088/1748-9326/ac3b17.

Li, Y., and S.W. Myint, 2021. Fine Resolution Air Quality Dynamics of Socioeconomic Factors and Land Use Land Cover Types in the Most Polluted Desert Metropolitan in the American Southwest, Science of the Total Environment (STOTEN), 788, 147713. DOI: 10.1016/j.scitotenv.2021.147713.

Tran, T.V., D.X. Tran, H. Nguyen, P. Latorre-Carmona, S.W. Myint, 2021. Characterising Spatiotemporal Vegetation Variations Using Landsat Time-series and Hurst Exponent Index in the Mekong River Delta, Land Degradation & Development, https://doi.org/10.1002/ldr.3934.

Cheung, S.Y., I. Walker, S.W. Myint, and R. Dorn, 2020. Assessing land degradation induced by recreational activities in the Algodones Dunes, California using MODIS satellite imagery, Journal of Arid Environments, 185(2021): 104334.

Wang, C., V.K. Turner, E.A. Wentz, Q. Zhao, and S.W. Myint, 2020: Optimization of Residential Green Space for Environmental Sustainability and Property Appreciation in Metropolitan Phoenix, Arizona, Science of the Total Environment, 763(2021): 144605.

Tran, D.X., T.V. Tran, D. Pearson, S.W. Myint, J. Lowry, T.T. Nguyen, 2001. Spatiotemporal Analysis of Forest Cover Change and Associated Environmental Challenges: A Case study in the Central Highlands of Vietnam, Geocarto International https://doi.org/10.1080/10106049.2021.2017013.

2020

Schaffer-Smith, D., S.W. Myint, R.L. Muenich, D. Tong, and J.E. DeMeester, 2020. Repeated hurricanes reveal risks and opportunities for social-ecological resilience to flooding and water quality problems, Environmental Science & Technology, DOI: 10.1021/acs.est.9b07815.

Bonney, M.T., Y. He, and S.W. Myint, 2020. Contextualizing the 2019-20 Australian bushfires: Quantifying landscape-level influences on past severity and recovery with Landsat and Google Earth Engine, Remote Sensing, 2020, 12 (23), 3942; https://doi.org/10.3390/rs12233942.

Wang, Z., C. Fan, Q. Zhao, S. W. Myint, 2020. A geographically weighted regression approach to understanding urbanization impacts on urban warming and cooling: A case study of Las Vegas, Remote Sensing, 222; doi:10.3390/rs12020222.

Zhu, Y., K. Liu, S.W. Myint, Z. Du, Y. Li, J. Cao, L. Liu, Z. Wu, 2020. Integration of GF2 optical, GF3 SAR, and UAV data for estimating aboveground biomass of China's largest artificially planted mangroves, Remote Sensing, 2020, 12(12), 2039; https://doi.org/10.3390/rs12122039.

Ma, J., X. Xiao, R. Li, B. Zhao, and S.W. Myint, 2019. Enhanced spring phenological temperature sensitivity explains the extension of carbon uptake period in temperate forest protected areas, Forest Ecology and Management, 455 (2020) 117679, https://doi.org/10.1016/j.foreco.2019.117679.

Zhu, Y., K. Liu, L. Liu, S.W. Myint, S. Wang, J. Cao, and Z. Wu, 2020. Estimating and mapping mangrove biomass dynamic changes using WorldView-2 images and digital surface models, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 13 (2020) 2123-2134.

2019

Fu, P., Xie, Y., Moore, C. E., Myint, S.W., and Bernacchi, C. J., 2019. A comparative analysis of anthropogenic CO2 emissions at city level using OCO-2 observations: A global perspective. Earth's Future, 7, 1058–1070. https://doi.org/10.1029/2019EF0012821058.

Tran, T. V., D. X. Tran, S. W. Myint, P. L. Carmona, D. D. Ho, P. H. Tran, and H. N. Dao, 2019. Assessing Spatiotemporal Drought Dynamics and Its Related Environmental Issues in the Mekong River Delta, Remote Sensing, 2019, 11, 2742; doi:10.3390/rs11232742.

Wang, C., Y. Li, S.W. Myint, Q. Zhao, E.A. Wentz, 2019. Impacts of Spatial Clustering of Urban Land Cover on Land Surface Temperature across Köppen Climate Zones in the Contiguous United States, Landscape and Urban Planning, 192, 103668. (doi:10.1016/j.landurbplan.2019.103668).

Liu, W., D. B. Agusdinata, and S. W. Myint, 2019. Spatio-temporal Patterns of Lithium Mining and Environmental Degradation in the Atacama Salt Flat, Chile, Journal: International Journal of Applied Earth Observations and Geoinformation, 80(2019):145-156.

Feng, Y., S. Du, and S. W. Myint, and M. Shu, 2019. Do urban functional zones interact with land surface temperature differently? A Case Study of Beijing, China, Remote Sensing, 2019, *11*(15), 1802; https://doi.org/10.3390/rs11151802.

Fu, P., Y. Xie, , S.W. Myint, K. Meacham-Hensold, and C. Bernacchi, 2019. A physical model-based method for retrieving urban land surface temperatures under cloudy conditions, Remote Sensing of Environment, 230, 111191 https://doi.org/10.1016/j.rse.2019.05.010.

Ishtiaque, A, H. Eakin, N. Chhetri, S.W. Myint, A. Dewan, M. Kamruzzaman, B. Sciance, and S. Nooner, 2019. Examination of coastal vulnerability framings at multiple levels of governance using spatial MCDA approach, Ocean and Coastal Management, 171: 66-79 (https://doi.org/10.1016/j.ocecoaman.2019.01.020).

Wang, C., Z. Wang, C. Wang, and S.W. Myint, 2019. Environmental cooling provided by urban trees under extreme heat and cold waves in U.S. cities, Remote Sensing of Environment, 227(2019):28-43.

Wang, C., S.W. Myint, M. Hutchins, 2019. The Assessment of Deforestation, Forest Degradation, and Carbon Release in Myanmar (2000-2010), Editor: Pankaj Thapa, Environment and conservation in the human-dominated Himalaya Book, Springer, pp 47-64.

Tran, T.V., D.X. Tran, S.W. Myint, C. Huang, H.V. Pham, T.H. Luu, T.M.T. Vo, 2019. Examining Spatiotemporal Salinity Dynamics in the Mekong River Delta Using Landsat Time Series Imagery and a Spatial Regression Approach, Science of the Total Environment, 687, 1087-1097.

2018

Estoque, R.C., S.W. Myint, C. Wang, A. Ishtiaque, T.T. Aung, L. Emerton, M. Ooba, H. Yasuaki, M.S. Mon, Z. Wang, C. Fan, 2018, Assessing environmental impacts and change in Myanmar's mangrove ecosystem service value due to deforestation (2000-2014), Global Change Biology, 24(11):5391-5410. doi: 10.1111/gcb.14409.

Wang, Y., B.K. Hu, S.W. Myint, C. Feng, W.T. Chow, P.F. Passy, 2018. Patterns of Land Change and Their Potential Impacts on Land Surface Temperature Change in Yangon, Myanmar, Science of the Total Environment, 643 (2018):738-750.

Estoque, R.C., Y. Murayama, R. Lasco, S. W. Myint, F.B. Pulhin, C. Wang, M. Ooba, Y. Hijioka, 2018. Changes in the Landscape Pattern of the La Mesa Watershed – The Last 2 Ecological Frontier of Metro Manila, Philippines, Forest Ecology and Management, 430(2018): 280-290.

Fan, P. J. Chen, N. Zaw; O. Zutao; N. K. Moe ; Z.N. Myint, J. Qi, and S.W. Myint, 2018.Urbanization and environmental changes in Yangon during economic transition of Myanmar, Environmental Research Letters, Environ. Res. Lett. 13 (2018) 095007.

Wang, C., S.W. Myint, P. Fan, M. Stuhlmacher, and J. Yang, 2018. The Impact of Urban Expansion on the Regional Environment in Myanmar: A Case Study of Two Capital Cities, Landscape Ecology, 33(5):765-782.

Wang, C., Middel, A., Myint, S., Kaplan, S., Brazel, A. J., & Lukasczyk, J. (2018). Assessing local climate zones in arid cities: The case of Phoenix, Arizona and Las Vegas, Nevada. *ISPRS Journal of Photogrammetry and Remote Sensing*, *141*, 59-71. https://doi.org/10.1016/j.isprsjprs.2018.04.009.

Fan, P.; J. Chen, Z. Ouyang, P. Groisman, T. Loboda, G. Gutman, A. Prishchepov, A. Kvashnina, J. Messina, N. Moore, S.W. Myint, J. Qi, 2018. Urbanization and sustainability under

transitional economies: A synthesis for Asian Russia, Environmental Research Letters, 13 (2018) 095007, https://doi.org/10.1088/1748-9326/aadbf8.

2017

Fan, C., S.W. Myint, S. Rey, and W. Li, 2017. Time series evaluation of landscape dynamics using annual Landsat imagery and spatial statistical modeling: Evidence from the Phoenix metropolitan region, International Journal of Applied Earth Observation and Geoinformation, 58:12-25.

Zhu, Y., Liu, K., Liu, L., Myint, S. W., Wang, S., Liu, H., & He, Z. (2017). Exploring the potential of world view-2 red-edge band-based vegetation indices for estimation of mangrove leaf area index with machine learning algorithms. *Remote Sensing*, *9*(10), [1060]. DOI: 10.3390/rs9101060

Myint, S.W., C. Wang, and A. Ishtiaque, 2017. A space-time analysis approach to tackle some emerging environmental issues, the 18th Annual World Bank Conference on Land and Poverty: Responsible Land Governance—Towards an Evidence-Based Approach, March 20-24, 2017, Washington, DC, p59.

Song, J., Z. Wang, S.W. Myint, and C. Wang, 2017. The hysteresis effect on surface-air temperature relationship and its implications to urban planning: An examination in Phoenix, Arizona, USA, Landscape and Urban Planning, 167(2017): 198-211.

Fan, C., S. W. Myint, S. Kaplan, A. Middel, B. Zheng, A. Raham, H. Huang, A. Brazel, and D. G. Blumberg, 2017. Understanding the Impact of Urbanization on Surface Urban Heat Islands – A Longitudinal Analysis of the Oasis Effect in Subtropical Desert Cities, Remote Sensing, 2017, 9, 672; doi:10.3390/rs9070672.

Wang, C, Wang, C., S.W. Myint, and Z. Wang, 2017. Landscape determinants of spatio-temporal patterns of aerosol optical depth in the two most polluted metropolitans in the United States, Science of the Total Environment, 609(2017):1556–1565.

Tran, D.X., F. Pla, P. Latorre-Carmona, S.W. Myint, M. Caetano, and H. V. Kieu, 2017. Characterizing the Relationship between Land Use Land Cover Change and Land Surface Temperature, ISPRS Journal of Photogrammetry and Remote Sensing, 124: 119–132.

Wang, C., J. Yang, S.W. Myint, Z. Wang, and B. Tong, 2016. Empirical Modelling and Spatio-temporal Patterns of Urban Evapotranspiration for the Phoenix Metropolitan Area, Arizona, GIScience and Remote Sensing, 53 (6), 778-792.

Kamal, S., Huang, H. P., & Myint, S. W. (2017). Numerical simulations to quantify the diurnal contrast in local climate trend induced by desert urbanization. *Environment Systems and Decisions*, 1-13. DOI: 10.1007/s10669-017-9657-2.

2016

Feng, X., and S.W. Myint, 2016. Exploring the Effect of Neighboring Land Cover Pattern on Land Surface Temperature of Central Building Objects, Building and Environment, 95:346-354.

Jenerette, G.D., S.L. Harlan; A. Buyantuev; W.L. Stefanov; J. Declet-Barreto; B.L. Ruddell; S.W.Myint; S. Kaplan; X. Li, 2016. Micro scale urban surface temperatures are related to land covers and lived experiences of residents in Phoenix, AZ USA, Landscape Ecology, 31(4):745-760.

Hamdan, A. and S.W. Myint, 2016. Biogeomorphic relationships and riparian vegetation changes along altered ephemeral stream channels: Florence to Marana, AZ, Professional Geographer, 68(1):26-38.

Li, Z., W. Shi, S.W. Myint, and G. Qiao, 2016. Semi-automated landslide inventory mapping from bitemporal aerial photographs using change detection and level set method, Remote Sensing of Environment, vol. 175, pp. 215-230. doi:10.1016/j.rse.2016.01.003.

Kaplan, S., C. Gilletti, W. Chow, and S.W.Myint, 2016. First order approximation of Broadband Albedo with High Resolution Quickbird Imagery: a case study for arid urban areas, Giscience and Remote Sensing, 53:3, 303-319, DOI: 10.1080/15481603.2016.1153944.

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Myint, S.W., 2001. A Robust Texture Analysis and Classification Approach for Urban Land-Use and Land-Cover Feature Discrimination, *Geocarto International*, 16(4)27-38.

Other Publications

- Myint, S.W., C. Thongthap, and A. Eiumnoh, 1997. Soil Nutrient Depletion Modeling Using Remote Sensing and GIS: A Case Study in Chonburi, Thailand. *Proceedings of the 18th Asian Conference on Remote Sensing*, 20-25 October, 1997, Kuala Lumpur, Malaysia, pp. R51-R53.
- Myint S. W., and S. Shrestha, 1997. *Macro-level Assessment and Monitoring of Coastal and Suspended Sediment Concentration and Vegetation Conditions (South China Sea)*, UNEP Environment Assessment Technical Report, United Nations Environment Program/Environment Assessment Programme for Asia and the Pacific, Bangkok, Classification No. 140.00 M33 1998 (pp. 24).
- Myint, S.W., 2000. *Image texture analysis with high-resolution multi-spectral image data using wavelet transforms* – UCGIS Web publication (http://dusk2.geo.orst.edu/ucgis/web/oregon/papers/myint.htm).
- Wentz, E.A., K.C. Seto, S.W. Myint, M. Netzband, and M. Fragkias, 2011. Urban Remote Sensing (URS) and Forecasting Urban Landuse (FORE) workshops: common ground and targeted opportunities, *UGEC Viewpoints,* (No. 6, Nov 2011).

Funded Grants

(1) NASA LCLUC (Co-PI) (2023-2026). Decoding Land Transitions across the Urban-Rural Continuums (URC): A Synthesis Study of Patterns, Drivers, and Socio-environmental Impacts in Southeast Asia.

(2) NASA ECOSTRESS (PI) (2020-2023). Changing Landscapes, Urban Heat Island and the Effects on City Water Conservation Policy.

(3) NSF INFEWS (Co-PI) (2017-2020). Linking Current and Future Hydrologic Change to Hydropower, Human Nutrition, and Livelihoods in the Lower Mekong Basin.

(4) NASA (PI) (2012 - 2017) Understanding Impacts of Desert Urbanization on Climate and Surrounding Environments to Foster Sustainable Cities Using Remote Sensing and Numerical Modeling, NASA Interdisciplinary Research in Earth Science Program - Impacts of Urbanization on the Environment.

(5) NSF (Single PI) (2012 - 2015) Wavelet Analysis of High Spatial Resolution Imagery for Urban Mapping Using Infinite Scale Decomposition Techniques.

(6) NOAA (PI) (2012 - 2015) (NOAA – CSI) Evaluation of Drought Risks and its Impact on Agricultural Land and Water Use to Support Adaptive Decision-making.

(7) ISSR (PI) (2016-2017) Institute for Social Science Research (ISSR) at ASU provides semester long seed grants to support development of proposals for external funding in the social sciences.

(8) ISSR (PI) (2015-2016) Institute for Social Science Research (ISSR) at ASU provides semester long seed grants to support development of proposals for external funding in the social sciences.

(9) NSF (Co-PI) (2010-2011), International Workshop on Geospatial Solutions to Analyze Rapid Urbanization, Elizabeth Wentz (PI).

(10) Decision Center for a Desert City (DCDC) funded project (PI, 2010/2011), The sensitivity of urban climate models to land cover fractions (with Elizabeth Wentz, Anthony Brazel).
(11) DCDC funded project (PI 2009 - 2010), Exploring heat island effect and water consumption in relation to spatial distribution and pattern of urban land covers in a desert city, (with Tony Brazel and Libby Wentz).
(12) DCDC funded project (Co-PI 2009 - 2010), Building spatially-explicit analytical tools for assessing and understanding water use under climatic uncertainty (with Libby Wentz and Tony Brazel).
(13) DCDC funded project (Co-PI - 2008), Neighborhood Evapotranspiration Variation in the City of Phoenix: an Hourly, Seasonal, and Annual Evaluation Using the Local-scale Urban Meteorological Parameterization Scheme (LUMPS).
(14) NSF (PI, 2007 – 2008), Modelling Tsunami Effects on Mangrove Ecosystems and the role they play in saving lives and properties (1st year seed grant).
(15) NASA grant (Co-PI, 2008 – 2010), Tropical Mangrove Forests: Global Distributions and Dynamics (1990-2005) (Co-PI with Chandra Prasad Giri, USGS Science Application International Corporation)/National Center for EROS, Edward Barbier, University of Wyoming, and Zhiliang Zhu, USGS National Center for EROS. USGS subcontract given to Arizona State University.
(16) Southwest Consortium for Environmental Research and Policy – FY 2006 Applied Border Environmental Research Program grant (2006-2007). Urban growth patterns along the U.S.-Mexico border, the case of Yuma-San Luis and Ambos Nogales (Co-PI with Jana Hutchins and Francisco Lara-Valencia).
(17) CAP LTER ASU summer grant (PI, 2006), Modeling Urban Impervious Surface Areas in Relation to Urban Heat Island Effects.
(18) NSF (PI, 2004 - 2007). An Exploration of Frequency-based Multi-scale Multi-decomposition Techniques for Effective Urban Mapping (Single PI).
(19) NASA (PI, 2003 - 2004) through Institute for Advanced Education in Geospatial Sciences, University of Mississippi, (National Open Competition), Dynamic online course for Community Growth (Co-PIs – Dr. Xiaojunn Yang, Florida State University, Dr. Qing Shen, University of Maryland, College Park).
(20) NASA EPSCoR Grant (PI, 2002). Automated Spatial Feature Extraction and Classification Within and Around Urban Environment Using High-resolution Digital Image Data.
(21) Junior Faculty Research Grant (PI, 2002). An Exploration of Lacunarity Approaches in Texture Analysis and Classification of Remotely Sensed Data: Comparisons with Fractal Analysis, Spatial Autocorrelation, and Spatial Co-occurrence Matrix (University of Oklahoma).
(22) NASA EPSCoR (2001) travel grant to visit NASA John C. Stennis Space Center for a research collaboration.

Editorial Services

(1) Editor-In-Chief – Urban Remote Sensing Section, Journal Remote Sensing (2018-present)
(2) Associate Editor - Ecological Processes (2019-present)
(3) Associate Editor – Journal Remote Sensing (2016-2018)

(4) Subject Editor - Ecosystem Health and Sustainability (2016-2020)
(5) Editor – International Journal of Remote Sensing (2013-2016)
(6) Editorial Advisory Board - International Journal of Remote Sensing (2017- present)
(7) Editorial Board Member – GIScience and Remote Sensing Journal (2015-present)
(8) Guest Editor – Special Issue, Thermal Remote Sensing Applications: Present Status and Future Possibilities, Remote Sensing Journal.

Significant Services

(1) Conference Chair, The 4th International Electronic Conference on Remote Sensing (https://ecrs-4.sciforum.net/), Part of the International Electronic Conference on Remote Sensing series, 25–27 Jan 2022.
(2) Discussant/Panelist, 2021 The American Association for the Advancement of Science (AAAS) Annual Meeting, Session on Dynamics in Urban Ecosystems and Environments: Multi-disciplinary Perspectives, February 8 - 11, 2021.
(3) NASA ECOSTRESS Application and Science Team Member (2019 – present).
(4) Judge, Outstanding Student Presentation Award Competition (OSPA), AGU meeting, 9-13 December 2019, San Francisco.
(5) Member, Scholarship Committee (2016-2017), American Association of Geographers (AAG) - Remote Sensing Specialty Group (RSSG).
(6) As per the invitation from the American Association of Geographers (AAG), I served as Expert and Chief Instructor for the AAG's My Community Our Earth (MyCOE) / SERVIR Partnership for Southeast Asian nations. I then conducted a workshop titled "Climate Change, Sustainable Landscapes, and/or Watersheds for Southeast Asian countries" from January 15 to January 25, 2014 in Bangkok. The workshop was jointly organized by AAG, NASA, and USAID and is part of the AAG's MyCOE / NASA SERVIR Partnership.
(7) Chair (2011-2013), American Association of Geographers (AAG) - Remote Sensing Specialty Group (RSSG)
(8) President, American Society for Photogrammetry and Remote Sensing - Southwest US Region (2009)
(9) NASA Land Cover and Land Use Change Science Team member (2001 – present)
(10) Project Associate - Urbanization and Global Environmental Change (UGEC) - An International Human Dimensions Programme on Global Environmental Change (IHDP) Core Project
(11) Member, USGS John Wesley Powell Center Working Group on Global Croplands and Water Use for Food Security in the 21st Century.
(12) Vice Chair (2009-2011), American Association of Geographers (AAG) - Remote Sensing Specialty Group
(13) Co-Chair, Technical Program Committee - 2010 ASPRS Annual Conference (2009-2010)
(14) Vice President, American Society for Photogrammetry and Remote Sensing - Southwest Region (2008)
(15) Director, Remote Sensing Specialty Group, Association of American Geographers (2008-2009)
(16) Session Organizer for the 2008 AAG meeting, American Association of Geographers (AAG) - Remote Sensing Specialty Group

(17) Director, American Society for Photogrammetry and Remote Sensing - Southwest US Region (2006 – 2007)
(18) Membership Chair, American Society for Photogrammetry and Remote Sensing - Southwest Region (2006)
(19) Faculty Advisor, ASU Chapter of the American Society for Photogrammetry and Remote Sensing (2007 – present)
(20) Award Committee, American Society for Photogrammetry and Remote Sensing - Southwest Region (2007 – present)
(21) UCGIS – ASU delegate (2006-2007)
(22) Member – Computer Committee (2006-2007), School of Geographical Sciences, ASU
(23) Member – Graduate Recruiting and Admission Committee (2006-2007), School of Geographical Sciences, ASU
(24) Forum organizer - School of Geographical Sciences, ASU (Fall 2006)
(25) Associate Director – Center for Spatial Analysis (2001-2005), University of Oklahoma
(26) Faculty Advisor – Geography Club (2002-2005), University of Oklahoma
(27) Faculty Sponsor – OU Chapter of the Gamma Theta Upsilon (2002-2005), University of Oklahoma
(28) Faculty Fellow – Institute for Science and Public Policy (2002-2005), University of Oklahoma.
(29) GIS Consultant – World Health Organization, Switzerland, 1999 (ref:STC 797794/001 - WHO)

Noteworthy University Services

(1) Inaugural Chair, Diversity and Inclusion Committee (largest committee of all committees), School of Geographical Sciences and Urban Planning, ASU (2018-2019).
(2) Dean's faculty advisory council, College of Liberal Arts and Sciences (2020 - current), ASU.
(3) Senator, College Senate, College of Liberal Arts and Sciences (2020 - current), ASU.

Federal Government Public Advisory Committees

(1) EPA panel member (2004) – Environmental Protection Agency proposal review panel.
(2) NSF panel member (2004) – National Science Foundation proposal review panel.
(3) NSF proposal reviewer (2004) – National Science Foundation (different program from the above).
(4) Proposal reviewer for the U.S. Civilian Research and Development Foundation and for science advisors to the State Department at Los Alamos, Sandia, Lawrence Livermore, Brookhaven and Pacific Northwest National Laboratories (2004).
(5) EPA proposal review panel (2005) – Environmental Protection Agency proposal review panel.
(6) NSF proposal review panel (2005) – National Science Foundation proposal review panel.
(7) NSF proposal reviewer (2005) – National Science Foundation (different program from the above).
(8) NSF proposal reviewer (2007) – National Science Foundation.
(9) NSF proposal reviewer (2009) - National Science Foundation.

(10) ARO proposal reviewer (2009) - U. S. Army Research Office.
(11) Proposal reviewer for Canada Foundation for Innovation, LEADERS OPPORTUNITY FUND (2011).
(12) Proposal reviewer for Research Grants Council, General Research Fund, Hong Kong (2011).
(13) Proposal reviewer for Belgian Earth Observation Programme, Belgian Science Policy Office, Belgium (2011).
(14) NSF proposal reviewer (2011) - National Science Foundation.
(15) NASA proposal review panel (2012) - National Aeronautics and Space Administration.
(16) NASA proposal review panel (2013) - National Aeronautics and Space Administration.
(17) NSF proposal reviewer (2015) - National Science Foundation.
(18) NSF proposal reviewer (2017) - National Science Foundation.
(19) NASA proposal reviewer and panel member (2023)
(20) NSF proposal reviewer and panel member (2023)

Other Services

(1) Gave a talk at Trevor G Browne High School (minority serving school in an under-resourced community) on May 6, 2014. The talk was well attended by middle and high school students from all science classes, followed by question and answer sessions. The talk was split into different sessions for middle school and high school students throughout the afternoon.
(2) Served as a Judge for student poster competition at 2014 American Geophysical Union, San Francisco.
(3) Served as a reviewer (Faculty Tenure/Promotion) for 12 Assistant Professors (considered for Associate Professor positions with tenure) and 9 Associate Professors (considered for Full Professor positions) for promotion and tenure at different Universities across the nation since I became Associate Professor in 2008.
(4) Served as a judge for the AAG Remote Sensing Specialty Group student honors paper competition at the 2010 AAG meeting. in Washington DC (April 14 to 18, 2010).
(5) Session Chair, Remote Sensing and GIS for Urban Analysis I - Friday, 4/16/10, from 8:00 AM - 9:40 AM, 2010 Association of American Geographers Meeting, Washington DC.
(6) Organizer for the Spring 2007 - Southwest Region of the American Society for Photogrammetry & Remote Sensing (SW-ASPRS) technical meeting at the Arizona State University. Served as Chair of two sessions and presented a paper titled Modeling Urban Land Covers Using Multiple Endmember Spectral Mixture Analysis at the Technical Meeting, Date: March 7, 2007.
(7) Forum organizer - School of Geographical Sciences, ASU (Fall 2006).
(8) Participated as a Judge in a Graduate Student Competition - Explain Your Research 1, 2, 3 held on March 3, 2006.
(9) Participated as a Judge in a Graduate Student Competition titled “2006 Earth, Life, and Social Sciences Graduate Research Symposium” (Competition for the best presentation awards) at Arizona State University.
(10) Served as Chair of the Geography session at the Arizona Nevada Academy of Science in Flagstaff, Arizona (31 March 2007).

(11) Served as a judge for the AAG Remote Sensing Specialty Group student honors paper competition at the 2007 AAG meeting. in San Francisco (April 17 to 23, 2007).

Professional Membership

(1) American Association of Geographers (AAG)
(2) Association of American Geophysical Union (AGU)
(3) Remote Sensing Specialty Group, Association of American Geographers (RSSG-AAG)
(4) GIS Specialty Group, Association of American Geographers (GISSG-AAG)
(5) American Society for Photogrammetry and Remote Sensing (ASPRS)
(6) American Association for the Advancement of Science (AAAS)
(7) Ecological Society of America (ESA)

Workshop

1. I organized a workshop as part of my NOAA funded project titled "Evaluation of Drought Risks and its Impact on Agricultural Land and Water Use to Support Adaptive Decision-making" on October 1, 2013 at ASU's SkySong in Scottsdale.
2. I was invited to serve as Instructor for a training program organized by International Society for Photogrammetry and Remote Sensing (ISPRS) and Asian Confer ence on Remote Sensing (ACRS) from November 3 to 5, 2014 at University of Forestry, Yezin, Naypyitaw. I served as instructor for the entire day on November 5, 2014.

Mentoring

Ph.D. Dissertation

- Prianjali Bose, Ph.D. (Supervisor)
- Babak Heidari, Ph.D. (Supervisor)
- Yubin Li, Ph.D. (Supervisor - completed 2023)
- Peiyuan Li, Ph.D. (Committee Member - completed 2021)
- Lorrayne Miralha, Ph.D. (Committee Member - completed 2021)
- Chenghao Wang, Ph.D. (Committee Member - completed 2019)
- Chuyuan Wang, Ph.D. (Supervisor - completed 2018)
- Yujia Zhang, PhD (Committee Member - completed 2018)
- Ara Ko, Ph.D. (Committee Member - completed 2018)
- Jiachuan Yang, Ph.D. (Committee Member - completed 2017)
- Jiyun Song, Ph.D. (Committee Member - completed 2017)
- Jiachuan Yang, Ph.D. (Committee Member - completed 2017)
- Jiyun Song, Ph.D. (Committee Member - completed 2017)
- Tiantian Xiang, Ph.D. (Committee Member - completed 2016)
- Chao Fan, Ph.D. (Supervisor - completed 2016)
- Chris Gilliette, Ph.D. (Committee Member - completed 2015)
- Samy Kamel, Ph.D. (Committee Member - completed 2015)
- Shai Kaplan, Ph.D. (Supervisor - completed 2014)

- Abeer Hamdan, Ph.D. (Supervisor - completed 2014)
- Xiran Zhou, Ph.D. (Committee Member -- completed 2014)
- John Connors, Ph.D. (Committee Member - completed 2014)
- Jeff Ackley, Ph.D. (Committee Member - completed 2014)
- Won Kyung Kim, Ph.D. (Co-Supervisor - completed 2011)
- Atsushi Nara, Ph. D. (Committee Member - completed - 2010)
- Elizabeth Ridder, Ph.D. (Committee Member - completed 2013)
- Shainan Zhang, Ph.D. (Committee Member - completed 2013)
- John Connors, Ph.D. (Committee Member - - completed 2015)
- Samy Kamal, Ph.D. (Committee Member - - completed 2013)
- Mariela Soto, Ph.D. (Committee Member - completed 2011)
- Gabe Judkins, Ph.D. (Supervisor - completed - 2009)
- Maria Menchu Maldonado, Ph.D. (Committee Member - present)

Master's Theses

- Ryan Reynolds, M.S. (Supervisor - completed 2018)
- Jazmine Russell M.S. (Committee Member - completed 2018)
- Min Jo Kang, M.A. (Supervisor - completed 2009)
- Jyoti Jain, M.A. (Supervisor - completed - 2007)
- Tracy Schirmang, M.S. (Co-Supervisor - completed 2013)
- Mellissa Wegner, M.S. (Co-Supervisor - completed 2011)
- Angela Wills, M.S. (Committee Member - completed - 2010)
- Scott Brown, M.S. (Committee Member - completed - 2010)
- Shika Gupta, M.S. (Committee Member - completed - 2010)
- Mihir Prakash, M.S. (Committee Member - completed - 2011)
- Jagadeesh B. Chirumamilla, M.S. (Committee Member - 2008)
- Ryosuke Akahori, Ph.D. (Committee Member - completed - 2007)
- Mihir Prakash, M.S. (Committee Member - completed 2011)
- Angela Wills, M.S. (Committee Member - completed - 2010)
- Scott Brown, M.S. (Committee Member - completed - 2010)
- Shika Gupta, M.S. (Committee Member - completed - 2010)
- Zhi Weng, M.S. (Supervisor - completed 2017)
- Shakthi Murugesan, M.S. (Supervisor - completed 2021)
- Ivone Masara, M.S. (Supervisor - completed 2021)
- Yichen Zhong, M.S. (Supervisor - completed 2019)
- Jingwei Lian, M.S. (Supervisor - completed 2019)
- Yousuf Mahid, M.A. (Supervisor - completed 2021)

Post-Doc Mentoring

1. Danica Schaffer-Smith (PhD, Duke University)
2. Jun Ma (Ph.D. University of Chinese Academy of Sciences)
3. Yuanhui Zhu (PhD, Sun Yat-sen University)
4. Baojuan Zheng* (PhD, Virginia Tech)

Undergraduate Mentoring

1. Holly Brown (ASU)
2. Garrett Abeln (ASU)
3. Aaron Champion, August 2004 (University of Oklahoma)
4. Gretchen Lehman (ASU)
5. Eric Kent, Honors Thesis Committee (ASU)
6. James Taysom, Honors Thesis Chair (ASU)
7. Richard Walker (ASU)
8. Yulin Hong (ASU)