

## **SOE W. MYINT**

## **(Curriculum Vitae)**

Dept. of Geography and Environmental Studies, Texas State University

The Meadows Center for Water and the Environment

Email: [bn041@txstate.edu](mailto:bn041@txstate.edu); Ph: (512) 245-0382

### **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 129<sup>th</sup> 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://alumni affairs.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<sup>nd</sup> place), 2000 South Western Division AAG meeting, Texas A&M University.
- (32) Best Student Paper Award (2<sup>nd</sup> 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**

### **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](https://doi.org/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>.

Shi, D, J. Song, Q. Zhong, S.W. Myint, P. Zeng, Y. Che, 2023. Cooling wisdom of ‘water towns’: How urban river networks can shape city climate?, *Remote Sensing of Environment*, 300 (2024) 113925, <https://doi.org/10.1016/j.rse.2023.113925>.

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](https://doi.org/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<sub>2</sub> domes and O<sub>3</sub> 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](https://doi.org/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

## **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 CO<sub>2</sub> 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](https://doi.org/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](https://doi.org/10.3390/rs9101060)

Myint, S.W., C. Wang, and A. Ishtiaque, 2017. A space-time analysis approach to tackle some emerging environmental issues, the 18<sup>th</sup> 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](https://doi.org/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](https://doi.org/10.1080/15481603.2016.1153944).

Wang, C., S.W. Myint, Z. Wang, J. Song, 2016. Spatio-temporal Modeling of the Urban Heat Island in the Phoenix Metropolitan Area: Land Use Change Implications, *Remote Sensing*, 8(185):1-17.

Galletti, C.S., B.L. Turner II, S.W. Myint, 2016. Land changes and their drivers in the cloud forest and coastal zone of Dhofar, Oman, between 1988 and 2013, *Regional Environmental Change*, 1-13, [10.1007/s10113-016-0942-2](https://doi.org/10.1007/s10113-016-0942-2).

Ishtiaque, A., S.W. Myint, C. Wang, 2016. Examining the ecosystem health and sustainability of the world's largest mangrove forest using multi-temporal MODIS products, *Science of the total Environment*, 569-570: 1241-1254.  
<http://www.sciencedirect.com/science/article/pii/S0048969716313870>.

Wang, C. and S.W. Myint, 2016. Environmental Concerns of Deforestation in Myanmar 2001-2010, *Remote Sensing*. 2016, 8(9), 728; doi:10.3390/rs8090728.

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.

Wang, Z., C. Fan, S.W. Myint, C. Wang, 2016. Size matters: what are the characteristic window sizes for urban planning strategies?, *PLOS-1, Source Areas for Urban Planning Strategies? PLoS ONE* 11(11): e0165726. doi:10.1371/journal.pone.0165726.

Estoque, R.C., Y. Murayama, and S.W. Myint, 2016. Effects of landscape pattern on land surface temperature: an urban heat island study in the megacities of Southeast Asia, *Science of the total Environment / Science of the Total Environment*, 577: 349–359.

-----

## **2015**

Myint, S.W., Tong Zhu, and Baojuan Zheng, 2015. A Novel Image Classification Algorithm Using Over-complete Wavelet Transforms, *IEEE Geoscience and Remote Sensing Letters*, 12(6):1232-1236.

Wang, C. and S.W. Myint, 2015. A Simplified Empirical Line Method of Radiometric Calibration for Small Unmanned Aircraft Systems-based Remote Sensing, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 8(5):1-10.

Myint, S.W., B. Zheng, E. Talen, C. Fan, S. Kaplan, A. Middel, M. Smith, H. Huang, and A. Brazel. 2015. Does the spatial arrangement of urban landscape matter? Examples of urban warming and cooling in Phoenix and Las Vegas. *Ecosystem Health and Sustainability* 1(4):15. <http://dx.doi.org/10.1890/EHS14-0028.1>.

Zheng, B., S.W. Myint, P.S. Thenkabail, and R. Aggarwal, 2015. A support vector machine to identify irrigated crop types using time-series Landsat NDVI data, *International Journal of Applied Earth Observation and Geoinformation*, 34 (2015):103-112.

Fan, C., S.W. Myint, and B. Zheng, 2015. Measuring spatial arrangement of urban vegetation and its impacts on seasonal surface temperatures, *Progress in Physical Geography*, 39(2), 199-219. doi: 10.1177/0309133314567583.

Kamal, S., H. Huang, and S.W. Myint, 2015. The influence of urbanization on the climate of Las Vegas metropolitan area: A numerical study, *Journal of Applied Meteorology and Climatology*, 54, 2157-2177.

Zhao, Q., S.W. Myint, Elizabeth Wentz, Chao Fan, 2015. Rooftop Surface Temperature Analysis in Urban Residential Environment, *Remote Sensing*, 7(9):12135-12159.

---

## **2014**

Kaplan, S., S. W. Myint, F. Chao and A. J. Brazel. 2014. Quantifying outdoor water consumption of urban landuse/land cover: Sensitivity to drought. *Environmental Management* 53(4):855-864. DOI: 10.1007/s00267-014-0245-7.

Wentz, E.A., A.J. Wills, W.K. Kim, S. W. Myint, P. Gober, and R. C. Balling, Jr., 2014. Factors Influencing Summertime Water Consumption in Multifamily Housing in Tempe Arizona, *Professional Geographer*, 66:3, 501-510, DOI: 10.1080/00330124.2013.805627.

Fan, C. and Myint, S.W., 2014. A comparison of spatial autocorrelation indices and landscape metrics in measuring urban landscape fragmentation. *Landscape and Urban Planning*, 121, 117-128.

Zhang, C., H. Cooper, D. Selch, X. Meng, F. Qiu, S.W. Myint, C. Roberts, and Z. Xie, 2014. Mapping Urban Land Covers Using Object-based Multiple Endmember Spectral Mixture 1 Analysis, *Remote Sensing Letters*, 121(2014): 117-128.

Galletti, C., and S.W. Myint, 2014. Land-use mapping in a mixed urban-agricultural arid landscape using ASTER imagery: An object-based image analysis approach, *Remote Sensing*, 2014, 6, 6089-6110.

Zheng, B., Myint, S.W., and C. Fan, 2014. Spatial configuration of anthropogenic land cover impacts on urban warming, *Landscape and Urban Planning*, 130(2014):104-111.

Kang, M.J., V. Mesev, and S.W. Myint, 2014. Urbanization and Quality of Stormwater Runoff: Remote Sensing Measurements of Land Cover in an Arid City, *Korean Journal of Remote Sensing*, 30(3):399-415.

Li, X., S.W. Myint, Y. Zhang, C. Galletti, X. Zhang, B.L. Turner, 2014. Object-based Land-Cover Classification for Metropolitan Phoenix, Arizona, Using Aerial Photography, *International Journal of Applied Earth Observation and Geoinformation*, 33 (2014): 321–330.

Wentz, E.A., S. Anderson, M. Fragkias, M. Netzband, V. Mesev, S.W. Myint, D. Quattrochi, A. Rahman, and K.C. Seto, 2014. Supporting Global Environmental Change Research: A Review of Trends and Knowledge Gaps in Urban Remote Sensing, *Remote Sensing*, 6:3879-3905.

Fan, C., B. Zheng, S.W. Myint, and R. Aggarwal, 2014. Characterizing changes in cropping patterns using sequential Landsat imagery: An adaptive threshold approach and application to Phoenix, Arizona, *International Journal of Remote Sensing*, 35 (20):7263-7278.

Fan, C., W. Li, L.J. Wolf, and S.W. Myint, 2014. A Spatiotemporal Compactness Pattern Analysis of Congressional Districts to Assess Partisan Gerrymandering: A Case Study with California and North Carolina, *Annals of the Association of American Geographers*, 105: 736-753, DOI:10.1080/00045608.2015.1039109.

Ackley, J.; J. Wu, M. Angilletta, S. W. Myint, and B. Sullivan, 2014. Rich lizards: How affluence and land cover influence the diversity and abundance of native lizards persisting in an urban landscape, *Conservation Biology*, 182:87–92.

Huang, H., B.C. Hedquist, T. Lee, and S.W. Myint, 2014, Climate Modeling for Renewable Energy Applications, *Advances in Meteorology* , Volume 2014, Article ID 354862, 2 pages (Editorial), <http://dx.doi.org/10.1155/2014/354862>.

Myint, S.W., B. Zheng, F. Chao, and M. Smith, 2014. The impact of spatial arrangements of built land cover types on urban warming, *Proceedings of the 2014 Asian Conference on Remote Sensing*, Nay Pyi Daw, Oct. 27 – 31, 2014, [http://www.a-a-r-s.org/acrs/administrator/components/com\\_jresearch/files/publications/OS-311%20Paper-2014-ACRS-Myint-final.pdf](http://www.a-a-r-s.org/acrs/administrator/components/com_jresearch/files/publications/OS-311%20Paper-2014-ACRS-Myint-final.pdf).

Myint, S.W., V. Mesev, D. Quattrochi, and E. A. Wentz, 2014. Urban Image Classification: Per-pixel Classifiers, Sub-pixel Analysis, Object-based Image Analysis, and Geospatial Methods, Editor Prasad Thenkabail, *Remote Sensing Handbook (Accepted)*.

Myint, S.W., J. Franklin, M. Buenemann, W. K. Kim, and C. P. Giri, 2014. Examining change detection approaches for tropical mangrove monitoring, *Photogrammetric Engineering and Remote Sensing*, 80(10):983-993.

---

## **2013**

Myint, S.W., E.A. Wentz, A.J. Brazel, and D.A. Quattrochi, 2013. The impact of distinct anthropogenic and vegetation features on urban warming, *Landscape Ecology*, 28:959-978.

Myint, S.W., C.S. Galletti, S. Kaplan, W. K. Kim, 2013. Object vs. Pixel: A systematic evaluation in urban environments, Geocarto International, <http://dx.doi.org/10.1080/10106049.2013.776642>, 28(7):657-678.

---

## **2012**

Kaplan, S., and S.W. Myint, 2012. Estimating agricultural water use through Landsat TM and a simplified surface energy balance modeling in the semi-arid environments of Arizona, Photogrammetric Engineering and Remote Sensing, 78(8):849-859.

Wagner, M. A., Myint, S.W., and R.S. Cerveny, 2012. Geospatial Assessment of Reconstruction Rates Following a Tornado Disaster, IEEE Transactions on Geosciences and Remote Sensing, 50(11):4313-4322.

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.

Middel, A., Brazel, A. J., Kaplan, S., & Myint, S. W., 2012. Diurnal summer cooling-water use tradeoff in Phoenix, AZ. Climate Research, 54:21-34, DOI: 10.3354/cr01103.

Wentz, E. A., D. A. Quattrochi, M. Netzband & S.W. Myint, 2012. Synthesizing urban remote sensing through application, scale, data and case studies, Geocarto International, 27:425-442.

Judkins, G. and S.W. Myint, 2012. Spatial Variation of Soil Salinity in the Mexicali Valley, Mexico: Application of a Practical Method for Agricultural Monitoring, Environmental Management, 50(3): 478-489.

Myint, S.W., and Mesev, V., 2012. A comparative analysis of spatial indices and wavelet-based classification, *Remote Sensing Letters*, 3(2): 141–150.

Middel, A., Brazel, A. J., Gober, P., Myint, S. W., Chang, H., & Duh, J.-D., 2011. Land cover, climate, and the summer surface energy balance in Phoenix, AZ and Portland, OR. International Journal of Climatology, 32, 2020-2032.

Gober, P., Middel, A., Brazel, A. J., Myint, S. W., Chang, H., Duh, J.-D., and L. House-Peters, 2012. Tradeoffs between water conservation and temperature amelioration in Phoenix and Portland: implications for urban sustainability. Urban Geography, 33(7):1030-1054.

Wentz, E.A., K.C. Seto, S.W. Myint, M. Netzband, and M. Fragkias, 2012. Urban Remote Sensing (URS) and Forecasting Urban Landuse (FORE) workshops: common ground and targeted opportunities, *UGEC Viewpoint*.

Dell'Acqua, F., E.A. Wentz, S.W. Myint, and M. Netzband, 2012. Understanding the Drivers and Consequences of Global Urbanization using Emerging Remote Sensing Technologies, *Earthzine*

- <http://www.earthzine.org/2011/09/30/understanding-the-drivers-and-consequences-of-global-urbanization-using-emerging-remote-sensing-technologies>.

---

## **2011**

Myint, S.W., and Stow, D., 2011. An object-oriented pattern recognition approach for urban classification. In X. Yang (Editor), *Urban Remote Sensing, Monitoring, Synthesis and Modeling in the Urban Environment*, John Wiley & Sons, pp 129-140.

Myint, S.W., Gober, P., Brazel, A., Grossman-Clarke, S., and Weng, Q., 2011. Per-pixel versus object-based classification of urban land cover extraction using high spatial resolution imagery, *Remote Sensing of Environment*, 115(2011): 1145-1161.

Middel, A., A. Brazel, B. Hagen, and S. Myint 2011. Land Cover Modification Scenarios and Their Effects on Daytime Heating in the Inner Core Residential Neighborhoods of Phoenix, Arizona, *Journal of Urban Technology*, 18(4):61-79.

Md Aktaruzzaman, Sharon Biermann, Anthony Brazel, Subhrajit Guhathakurta, Bjoern Hagen, Hans Hagen, Luc Heischbourg, Dongwoo Lee, Ariane Middel, Kerstin Müller, Soe Myint, Kyushik Oh, and Changsug Park, 2011. Planning Support Toolkits for Building Sustainable Communities, *Journal of Urban Technology*, 18(4), 113-114.

---

## **2010**

Myint, S.W., 2010. Multi-resolution Decomposition in Relation to Characteristic Scales and Local Window Sizes Using an Operational Wavelet Algorithm, *International Journal of Remote Sensing*, 31(10):2551-2572.

Gober, P., A. Brazel, R. Quay, S.W. Myint, S. Grossman-Clarke, A. Miller, and S. Rossi, 2010. Using Watered Landscapes to Manipulate Urban Heat Island Effects, How Much Water Will It Take to Cool Phoenix?, *Journal of the American Planning Association*, 76:109-121.

Myint, S.W., 2010. Spatial Autocorrelation, *Encyclopedia of Geography* editor B. Warf, London and Thousand Oaks, CA: Sage Publications, Inc., pp 2607-2608.

Myint, S.W., Brazel, A., Okin, G., and Buyantuyev, A., 2010. An interactive function of impervious and vegetation covers in relation to the urban heat island effect in a rapidly urbanizing desert city, *GIScience and Remote Sensing*, 47: (3) 301-320.

Myint, S. W., Jyoti, J., S Guhathakurta, 2010. Patterns and rates of land use change: a case study of Ambos Nogales (Arizona and Sonora), *Journal of Latin American Geography*, 9(3): 246-274.



Myint, S.W., Jain, J., Lukinbeal, C., and Lara-Valencia, F., 2010. Simulating urban growth on the U.S.-Mexico border: Nogales, Arizona and Nogales, Sonora, *Canadian Journal of Remote Sensing*, 36(3): 166-184.

---

## **2009**

Myint, S.W., and G.S. Okin, 2009. Modelling land-cover types using multiple endmember spectral mixture analysis in a desert city, *International Journal of Remote Sensing*, 30(9):2237 – 2257.

---

## **2008**

Myint, S.W., C.P. Giri, L. Wang, Z. Zhu, and S. Gillette, 2008. Identifying mangrove species and their surrounding land use and land cover classes using an object oriented approach with a lacunarity spatial measure, *GIScience and Remote Sensing*, 45(2):188-208.

Myint, S.W., 2008. An Exploration of Spatial Dispersion, Pattern and Association of Socio-economic Functional Units in an Urban System, *Applied Geography*, 28(2008):168-188 (Listed as one of the top 25 hottest articles by Science Direct at that time).

Myint, S.W., M. Yuan, R. Cervený, and C.P. Giri, 2008. Categorizing Natural Disaster Damage Assessment Using Satellite-Based Geospatial Techniques, *Natural Hazards and Earth System Sciences*, 8:707-719.

Myint, S.W., M. Yuan, R. Cervený, and C.P. Giri, 2008. Comparison of remote sensing image processing techniques to identify tornado damage areas from Landsat TM data, *Sensors*, 8: 1128-1156.

---

## **2007**

Tang, J, L. Wang, and S.W. Myint, 2007. Improving urban classification through fuzzy supervised classification and spectral mixture analysis, *International Journal of Remote Sensing*, 28(18): 4047-4063.

Myint, S.W., E. Wentz, and S. Purkis, 2007. Employing spatial metrics in urban land use/land cover mapping: comparing the Getis and Geary indices, *Photogrammetric Engineering and Remote Sensing*, 73(21):1403-1415. (Best Paper Award Winner).

---

## **2006**

Myint, S.W., 2006. Urban vegetation mapping using sub-pixel analysis and expert system rules: A critical approach, *International Journal of Remote Sensing*, 27(12-14):2645-2665.

S.J. Purkis, S.W. Myint, and B. M. Riegl, 2006. Enhanced detection of the coral *Acropora cervicornis* from satellite imagery using a textural operator, *Remote Sensing of Environment*, 101(2006):82-94.

Myint, S.W., V. Mesev, and N.S.N Lam, 2006. Urban Textural Analysis from Remote Sensor Data: Lacunarity Measurement based on the Differential Box Counting Method, *Geographical Analysis*, 38:371-390.

Myint, S.W. and L. Wang, 2006. Multi-criteria Decision Approach for Land Use Land Cover Change Using Markov Chain Analysis and Cellular Automata Approach, *Canadian Journal of Remote Sensing*, 32(6):390-404.

Myint, S.W., 2006. A New Framework for Effective Urban Land Use Land Cover Classification: A Wavelet Approach, *GIScience and Remote Sensing*, 43(2):155-178.

Myint, S.W., 2006. Urban Mapping with Geospatial Algorithms, *Urban Remote Sensing* (Qihao Weng and Dale Quattrochi, editors), Taylor and Frances, pp. 109-135.

---

## **2005**

Myint, S.W., and N.S.N Lam, 2005. A Study of Lacunarity-Based Texture Analysis Approaches to Improve Urban Image Classification, *Computers, Environment, and Urban Systems*, 29(2005):501-523.

Myint, S.W., and N.S.N Lam, 2005. Examining Lacunarity Approaches in Comparison with Fractal and Spatial Autocorrelation Techniques for Urban Mapping, *Photogrammetric Engineering and Remote Sensing*, 71(8):927-937.

---

## **2004**

Myint, S.W., N.S.N. Lam, J. Tyler, 2004. Wavelet for Urban Spatial Feature Discrimination: Comparisons with Fractal, Spatial Autocorrelation, and Spatial Co-occurrence Approaches, *Photogrammetric Engineering and Remote Sensing*, 70(7):803-812.

---

## **2003**

Myint, S.W., 2003. Fractal Approaches in Texture Analysis and Classification of Remotely Sensed Data: Comparisons with Spatial Autocorrelation Techniques and Simple Descriptive Statistics, *International Journal of Remote Sensing*, 24(9): 1925-1947.

Myint, S.W., 2003. The Use of Wavelets for Feature Extraction of Cities in Satellite Images, *Remotely Sensed Cities* (Victor Mesev, editor), Taylor and Frances, pp. 109-134.

Walker, N., S.W. Myint, A. Babin and A. Haag, 2003. Advances in satellite radiometry for the surveillance of surface temperatures, ocean eddies and upwelling processes in the Gulf of Mexico using GOES-8 measurements during summer, *Geophysical Research Letters*, 30(16): 1854,doi:10.1029/2003GLO17555.

---

## **2002**

Myint, S.W., and N. Walker, 2002. Quantification of Surface Suspended Sediments Along a River Dominated Coast with NOAA AVHRR and SeaWiFS Measurements: Louisiana, USA, *International Journal of Remote Sensing*, 23(16): 3229-3249.

Myint, S.W., N.S.N. Lam, J. Tyler, 2002. An Evaluation of Four Different Wavelet Decomposition Procedures for Spatial Feature Discrimination Within and Around Urban Areas, *Transactions in GIS*, 6(4):403-429.

Walker, N.D., H. Roberts, G. Stone, S. Bentley, O. Huh, A. Sheremet, L. Rouse, M. Inoue, S. Welsh, S.A. Hsu, and S.W. Myint, 2002. Satellite-based assessment of sediment transport, distribution and resuspension associated with the Atchafalaya River discharge plume, Gulf Coast Association of Geological Societies Transactions 52, 967-973.

---

## **2001**

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. Netzbant, 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 (1<sup>st</sup> 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 Conference 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)

### **Conference Presentations/ Exhibitions/ Colloquia**

#### **2022 Presentations**

##### ***Invited presentations***

1. Myint, S.W. (2022). Invited talk titled “Enhancing green infrastructures and considering water in one of the most polluted and warmest cities in the US: An operational optimization scheme”, NASA ECOSTRESS Science and Applications Team Meeting, 04/18/2022.

2. Myint, S.W. (2022). Invited talk titled “Widespread race and ethnicity disparities with respect to social and environmental inequity issues across major cities in the US southwest”, NASA ECOSTRESS Science and Applications Team Meeting, 12/17/2022.

### **2022 Presentations**

#### ***Invited presentations***

1. Myint, S.W. (2022). Gave a keynote speech at the 4<sup>th</sup> International Electronic Conference on Remote Sensing as Chair of the conference, 25-27 January 2022.

### **2021 Presentations**

#### ***Invited presentations***

2. Myint, S.W. (2021). Invited talk titled “Advancing environmental social justice by examining intra-urban social inequity”, NASA ECOSTRESS Science and Applications Team Meeting, 08/17/2021.

#### ***Non-invited presentations***

1. Myint, S.W. (2021). Formulating mitigation options and examining intra-urban social inequality using evidence-based urban warming effects, 12/17/2021, AGU Conference, 2021.

### **2020 Presentations**

#### ***Invited presentations***

1. Myint, S.W. (2020). Invited talk titled “Examining our changing urban environment: from spatial pattern to sustainable development”, Fri 10/30/2020 1:00 PM - 2:30 PM, Department of Geography & Geographic Information Science, University of Illinois – Urbana Champaign.
2. Myint, S.W. (2020). Invited talk titled “Changing landscapes, urban heat island and the effects on city water conservation policy”, NASA ECOSTRESS Science and Applications Team Meeting, 12/1/2020, Ventura CA.

#### ***Non-invited presentations***

2. Myint, S.W. (2020). Modeling Wildfire Dynamics Using NASA ECOSTRESS Data and Machine Learning Algorithms: The Case of South-Eastern Australia’s Black Summer, Tuesday, 8 December 2020, AGU Conference, 2020.

### **2019 Presentations**

#### ***Invited presentations***

- Myint, S.W. (2019). Invited talk titled “Examining ground and surface water changes in response to environmental issues and land use dynamics in Canada” in the Department of Geography at the University of Toronto, Mississauga on November 20, 2019.
- Myint, S.W. (2019). Invited talk titled titled “How Much Does Choice of Crop Type and Multiple Cropping Matter for Climate Adaptation? A Study of Crop Water Use in

- Arizona” the 2019 conference of the Canadian Association of Geographers’ Prairie Division (Sept. 27-29, 2019).
- Myint, S.W. (2019). Invited talk titled “Examining ground and surface water changes in response to environmental issues and land use dynamics: The case of provinces in central and western Canada” in room CW115 at the University of Regina on October 24, 2019.
- Myint, S.W. (2019). Invited talk titled “Spatial pattern concept and space-time modeling approach to tackle emerging urban issues” at Fudan University, China on November 26, 2019.
- Myint, S.W. (2019). Invited talk titled “Space-time modeling approach to tackle emerging issues” at the Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang, China on November 29, 2019.
- Myint, S.W. (2019). Invited talk titled “Does the Spatial Configuration of Urban Landscape Matter? Examples of Urban Warming and Cooling” at the Land Use/Cover Changes, Environment and Emissions in South/Southeast Asia – An International Regional Science Meeting, 22-24th July, 2019.

#### ***Non-invited presentations***

- Myint, S.W. (2019). Spatio-temporal analysis of aerosol optical depth in the two most polluted metropolitans at the fifth biannual meeting of the NASA Health and Air Quality Applied Science Team (HAQAST), Phoenix, Arizona on January 3 – 4 2019.

#### **2018 Presentations**

##### ***Invited presentations***

- Myint, S.W. (2018). Invited speech titled spatio-temporal modeling approaches: tackling emerging environmental issues given at the 2018 Lower Mekong Research Symposium on September 6-7, 2018 in Ho Chi Minh City, Vietnam.
- Myint, S.W. (2018). Invited speech titled Adapting Crop water Management Climate Uncertainty for a Spatial Decision Support System at the Land Cover/Land Use Changes (LC/LUC) and Impacts on Environment in South/Southeast Asia - International Regional Science Meeting, 28-30th May 2018, Philippines.

#### ***Non-invited presentations***

- Myint, S.W. (2018). Evaluating the status of Myanmar’s mangrove forest and their ecosystem services from 2000 to 2014, American Association of Geographers (AAG) meeting, New Orleans, April 11, 2018.

#### **2017 Presentations**

##### ***Invited presentations***

- Myint, S.W. (2017). Keynote Speech given at the Conference on Geographic Information Technologies, Spatial Statistics, and Remote Sensing Approaches for Environmental Monitoring and Natural Resource Management, Hanoi National University of Education, Hanoi, Vietnam (December 22, 2017). Title - “titled “Spatio-temporal modeling approaches: Tackling emerging environmental issues.”

- Myint, S.W. (2017). Evaluating the Status and Ecosystem Services of Myanmar's Mangroves (2000-2014) at Land Cover/Land Use Change SARI International Regional Science Meeting in South/Southeast Asia, Chiang Mai, Thailand 17-19<sup>th</sup>, 2017.
- Myint, S.W., 2017. Spatio-temporal Modeling Approaches: Tackling Emerging Environmental Issues, Center for Spatial Analysis and Research Center (SPARC) Launch, December 7, 2017, ASU, Tempe.

#### ***Non-invited presentations***

- Myint, S.W. (2017). An Examination of the impacts of Urbanization on the Environment: Experiences from current and former capitals of Myanmar, American Association of Geographers (AAG) meeting, Boston, April 8, 2017.
- Myint, S.W. (2017). A Space-Time analysis approach to tackle some emerging environmental issues, the 18<sup>th</sup> Annual World Bank Conference on Land and Poverty: Responsible Land Governance—Towards an Evidence-Based Approach, March 22, 2017, Washington, DC.
- Myint, S.W. (2017). An Examination of the impacts of Urbanization on the Environment: Experiences from current and former capitals of Myanmar, Symposium, Baltimore, April 10, 2017.

#### **2016 Presentations**

##### ***Invited presentations***

- Myint, S.W. (2016). Invited talk given at the 4<sup>th</sup> International Conference on Environmental Sciences (Dubai - Dec 8, 2016 ) – Title: The impact of distinct anthropogenic and vegetation features on desert urban warming.
- Myint, S.W. (2016). Invited talk given at International Land Cover/Land Use Changes Regional Sciences Meeting in South and Southeast Asia, Yangon, Myanmar, January 13-15, 2016 – Titled: Deforestation in Myanmar – Land and Atmospheric Effects.
- Myint, S.W. (2016). Invited talk given at San Diego State University Department of Geography (October 7, 2016) – Title: A space-time analysis to tackle some emerging environmental issues.
- Myint, S.W. (2016). Invited talk given at the 2016 International Meeting on Land Use and Emissions in South/Southeast Asia, Ho Chi Minh City, Vietnam, October 17-19, 2016. Titled: An Examination of the impacts of Urbanization on the Environment: Experiences from current and former capitals of Myanmar.
- Myint, S.W. (2016). Invited talk given at University of Yangon, Myanmar, January 12, 2016. Titled: Environmental Consequences Due to Deforestation and Forest Degradation in Myanmar.

##### ***Non-invited presentations***

1. Soe Myint, 2016. Titled: Urban heat islands: Global variation and determinants in hot desert cities, presented at the LCLUC Spring Science Team Meeting, 2016 (20<sup>th</sup> Anniversary), 18<sup>th</sup>-19<sup>th</sup> April, 2016, North Bethesda, Maryland.
2. Soe Myint, 2016. Titled: Environmental Concerns on Deforestation in Myanmar (2001 – 2010), presented at 2016 Association of American Geographers Annual Meeting (AAG), San Francisco.

## **2015 Presentations**

### ***Invited presentations***

- Myint, S.W. (2015). Invited talk titled “Research Management in a New American University” to a delegation and members from Chinese Academy of Sciences at the ASU Memorial Union, Sept. 11, 2015.
- Myint, S.W. (2015). Keynote Speaker at Harbin Normal University. Titled “Remotely sensed climate stories: micro and macro scale examples,” July 1, 2015.
- Myint, S.W. (2015). Invited talk at United Nations Population Fund (UNFPA). Titled Remotely sensed stories: land use land cover change, desert urbanization, population growth, and climate change.”
- Myint, S.W. (2015). Invited talk at King Fahd University of Petroleum and Minerals. Titled “Remotely sensed urban data for planning a sustainable future” on April 7, 2015 at KFUPM Building #19.
- Myint, S.W. (2015). Invited talk at a workshop titled Innovations in Sustainable Food Systems: Improving Youth Engagement and Entrepreneurship on the Farm and Beyond, organized by the the Julie Ann Wrigley Global Institute of Sustainability. Talk titled “Farmer-friendly Support Tools Using Remote Sensing.”
- Myint, S.W. (2015). Invited talk titled “Land use land cover change in connection to water use, carbon release, land degradation, food security, disaster issues, and climate change,” Second 2015 International Workshop: To Explore Research Frontiers through Partnerships in the Lower Mekong Basin and the Mekong National History Museum, Ho Chi Minh city, Vietnam, 30 Nov – 1 Dec, 2015.
- Myint, S.W. (2015). Invited talk titled “Remotely sensed stories: land use land cover change, desert urbanization, population growth, and climate change,” Center for Behavior, Institutions and the Environment at ASU, 2 March, 2015.

### ***Non-invited presentations***

- Myint, S.W. (2015). Exploring the influence of built and vegetative features on urban warming and cooling: Does spatial arrangement matter? American Meteorological Society 95th Annual Meeting in Phoenix, AZ.
- Myint, S.W. (2015). Gave a talk to officials from SRP. Title “Evaluation of Drought Risks and its Impact on Agriculture Land and Water Use to Support Adaptive Decision-making (2012-2015).”
- Myint, S.W. (2015). A Novel Image Classification Algorithm Using Over-complete Wavelet Transforms, AAG Meeting, Chicago, 2015.
- Myint, S.W. (2015). Remotely sensed stories: land use land cover change, desert urbanization, population growth, and climate change, Center for Behavior, Institutions and the Environment at ASU, 2 March, 2015.

## **2014 Presentations**

### ***Invited presentations***



- Myint, S.W. (2014). Invited talk given at Summit Parkview Hotel, organized by ECODEV, February 11, 2014. Titled: Remotely Sensed Environmental Issues and Solutions: Examples and Case Studies.
- Myint, S.W. (2014). Invited talk given at National University of Singapore (14<sup>th</sup> February 2014). Titled: Can pixels tell climate related stories?.
- Myint, S.W. (2014). I gave a talk at a workshop for K-12 teachers organized by Arizona Geographic Aliances, Title “Remote Sensing (Background and example applications).”

#### ***Non-invited presentations***

- Myint S.W. (2014). Exploring the spatial configuration of anthropogenic features and the effect it has on surface temperatures, 2014 AAG Annual Meeting, Tampa, Florida.
- Myint, S.W. (2014). The impact of spatial configuration of anthropogenic features on urban warming, 35th Asian Conference on Remote Sensing (ACRS), held in Nay Pyi Taw, Myanmar, 27-31 October, 2014.
- Myint, S.W. (2014). Does the spatial arrangement of vegetation and anthropogenic land cover features matter? Case studies of urban warming and cooling in Phoenix and Las Vegas, 2014. American Geophysical Union, San Francisco, 15-19 December, 2014.

#### **2013 Presentations**

##### ***Invited presentations***

- Myint, S.W. (2013). Fall regional NASA LCLUC Science Meetings on Land Use and Water Resources (Both leadership summit and technical meeting) from Nov 6 to Nov 13, 2013 in Uzbekistan. I attended the meetings and gave presentations.
- Myint, S.W. (2013). I was asked to give a talk and present a poster with regards to the NASA project overview, and preliminary results and findings of my current NASA project at the annual NASA LCLUC Science meeting. Hence, I attended and gave presentations at the NASA Science meeting between April 2, 2013 and April 4, 2013 in Washington DC.
- Myint, S.W. (2013). Can pixels tell climate change stories?, School of Geographical Sciences and Urban Planning Colloquium, Sept. 20, 2013.
- Myint, S.W. (2013). The Impact of distinct Anthropogenic and Vegetation Features on Urban Warming, Jamia Millia Islamia University, New Delhi, India on March 19, 2013
- Myint, S.W. (2013). The Impact of Detailed Land-cover Categories on Urban Warming, Jawaharlal Nehru University, New Delhi, India on March 19, 2013.

##### ***Non-invited presentations***

- Myint, S.W. (2013). The impact of distinct anthropogenic and vegetation features on urban warming, Association of American Geographers Meeting, April 9-13, 2013, Los Angeles, CA.
- Myint, S.W. (2013). Exploring the relation between spatial configuration of buildings and remotely sensed temperatures, American Geophysical Union Annual meeting, Dec 11 – Dec 13, 2013, San Francisco, CA.

Myint, S.W. (2013). The impact of detailed land-cover classes on desert urban warming, Deserts & Desertification Conference, 12 -15 November, 2012, Ben-Gurion University, Israel.

Myint, S.W. (2013). Land Change and Degradation Along the US-Mexico Border, The Case of Ambos Nogales, Drylands, Deserts & Desertification Conference, 12 -15 November, 2012, Ben-Gurion University, Israel.

#### **2012 Presentations**

Myint, S.W. (2012). An evaluation of segmentation parameters and nearest neighbor classifier in comparison to per-pixel supervised and unsupervised approaches, Association of American Geographers Meeting, 02/24/2012-02/28/2012, New York, New York.

#### **2011 Presentations**

Myint, S.W. (2011). Monitoring mangrove deforestation: a comparison of change detection techniques, Association of American Geographers Meeting, 4/13/11, Seattle, Washington.

#### **2010 Presentations**

Myint, S.W. (2010). The impact of detailed land-cover categories on urban warming, Association of American Geographers Meeting, Friday, 4/16/10, Washington DC.

#### **2009 Presentations**

##### ***Invited presentations***

Myint, S.W. (2009). First Brown Bag Lunch presentation for GeoDa titled “Object-based urban classification using a fine resolution imagery” February 5, 2009.

Myint, S.W. (2009). Object-Based Urban Mapping, Southwest US Region, American Society for Photogrammetry & Remote Sensing (SWASPRS) Technical Meeting and 53rd Annual Arizona-Nevada Academy of Sciences (ANAS) Meeting, University of Arizona, Tucson, AZ, 4 April 2009.

##### ***Non-invited presentations***

Myint, S.W. (2009). Identification of Urban Land Covers Using An Object-oriented Approach, 2009 AAG Annual Meeting, Las Vegas, NV, Thursday, 3/26/09.

Myint, S.W. (2009). Land use and Land Cover Change along the US-Mexico Border, The Case of Ambos Nogales, USA National Phenology Network (USA-NPN) & SW Region, American Society for Photogrammetry & Remote Sensing (SW-ASPRS), University of Arizona, Tucson, AZ, October 2, 2009.

#### **2008 Presentations**

##### ***Invited presentations***

Myint, S.W. (2008). Urban Growth Patterns along the U.S.-Mexican Border: The Case of Yuma-San Luis and Ambos Nogales, 2008 Southwest Consortium for Environmental Research and Policy (SCERP) Annual Technical Conference at Arizona State University Memorial Union, December 5, 2008.

Myint, S.W. (2008). From sub-pixel to a group of pixels in environmental remote sensing, School of Geographical Sciences, ASU, February 8, 2008.

#### ***Non-invited presentations***

Myint, S.W. (2008). An object-oriented approach and a lacunarity measure to identify different mangrove species and their surrounding land-use and land-cover types, 2008 AAG meeting, (April 15 to 19, 2008) in Boston.

Myint, S.W. (2008). Identifying Tornado Damaged Areas Using An Object-oriented Approach and Change Detection Techniques, Southwest Region of the ASPRS technical meeting and the 52<sup>nd</sup> annual meeting of the Arizona Nevada Academy of Science (ANAS) at Southwest College, Phoenix.

#### **2007 Presentations**

##### ***Invited presentations***

Myint, S.W. (2007). Which approach is the best: sub-pixel, per-pixel, or geospatial techniques in image processing, Oregon State University (invited), November 2, 2007.

Myint, S.W. (2007). An interactive function of impervious and vegetation covers in relation to the urban heat island effect, University of Oklahoma, August, 24, 2007.

Myint, S.W. (2007). Modeling Urban Land Covers Using Multiple Endmember Spectral Mixture Analysis at the American Society for Photogrammetry & Remote Sensing (ASPRS) Southwest Region Spring 2007 Technical Meeting, March 7, 2007, Global Institute of Sustainability, Arizona State University.

##### ***Non-invited presentations***

Myint, S.W. (2007). Quantifying impervious surfaces in the Phoenix metropolitan area using multiple endmember spectral mixture analysis, 2007 AAG meeting, (April 17 to 23, 2007) in San Francisco.

Myint, S.W. (2007). A Lacunarity Approach for Urban Land Use Land Cover Classification at the 51<sup>st</sup> Annual Meeting of the Arizona-Nevada Academy of Sciences and part of Southwest Region, American Society of Photogrammetry & Remote Sensing, Northern Arizona University (March 31, 2007).

Myint, S.W. (2007). Quantifying impervious surfaces in the Phoenix metropolitan area using multiple endmember spectral mixture analysis, The CAP LTER Symposium, January 10<sup>th</sup> from 8:00 am to 4:30 pm, Carson Ballroom, Arizona State University.

#### **2006 Presentations**

Myint, S.W. (2006). An Exploration of Spatial Dispersion, Pattern, and Association of Socio-economic Functional Units in an Urban System, The 2006 Meeting of The AAG, March 7-11 2006, Chicago, IL.

Myint, S.W. (2006). Mapping urban vegetation using sub-pixel analysis and expert system rules, 50<sup>th</sup> Annual Meeting of the Arizona-Nevada Academy of Science, University of Arizona, Tucson, April 8, 2006.

#### **2005 Presentations**

### ***Invited presentations***

- Myint, S.W. (2005). A Multi-scale Framework for Effective Land-Use Land-Cover Mapping: A Wavelet Approach in Comparison to Other Advanced Geospatial Techniques. Paper presented at the USGS EROS, Sioux Falls, South Dakota (September 19-20, 2005).
- Myint, S.W. (2005). A Multi-scale Framework for Effective Land-Use Land-Cover Mapping. Paper presented at the Meadowlands Environmental Research Institute, New Jersey Meadowlands Commission, Lyndhurst, New Jersey (October 16 -18, 2005).

### ***Non-invited presentations***

- Myint, S.W. (2005). A New Wavelet Based Classification Framework. Paper presented at Poyang Lake Complex Environment Conference, Nanchang, Jinagxi province, China (June 27-29, 2005).
- Myint, S.W. (2005). A New Operational Algorithm for Effective Urban Classification: A Wavelet Approach. Paper presented at the Association of American Geographers annual meeting, Denver (5 - 9 April, 2005).

### **2003 Presentations**

- Myint, S.W. (2003). An Exploration of Lacunarity Approaches in Urban Texture Analysis and Classification. Paper presented at the Association of American Geographers annual meeting, New Orleans (5 - 8 March, 2003).

### **2001 Presentations**

- Myint, S.W. (2001). Fractal Approaches in Texture Analysis and Classification of Remotely Sensed Data: Comparisons with Spatial Autocorrelation Techniques and Simple Descriptive Statistics. Paper presented at the Southwestern Division of the Association of American Geographers SWAAG Meeting, Ft. Worth, Texas (14-17 November, 2001).
- Myint, S.W. (2001). Comparisons Between Wavelet Transforms and Fractal Analysis Methods for discriminating classes of Urban Land Cover From High Resolution Image Data. Paper presented at the Association of American Geographers annual meeting, New York (27 Feb. - 3 March, 2001).

### **2000 Presentations**

#### ***Invited presentations***

- Myint, S.W. (2000). Image texture analysis with high-resolution multispectral image data using wavelet transforms. Paper presented at the 2000 University Consortium for Geographic Information Science (UCGIS) Annual Assembly and Summer Retreat, Portland, Oregon (21 - 24 June, 2000).

#### ***Non-invited presentations***

- Myint, S.W. (2000). Wavelet transforms: an efficient alternative approach to traditional land cover classifiers. Paper presented at the Southwestern Division of the Association of American Geographers SWAAG Meeting at the Texas A&M University (2 - 4 November, 2000).

Myint, S.W. (2000). Comparisons between Urban Mapping Units Derived from Spatial Co-occurrence Matrix and Wavelet Transforms. Paper presented at the American Society for Photogrammetry and Remote Sensing - Fall 2000 Mid-South Region Meeting (MS-ASPRS), at the Clemson University, Clemson, South Carolina (19 - 20 October, 2000).

Myint, S.W. (2000). The Use of Wavelets for Feature Extraction of Urban Areas in Satellite Images. Paper presented at the Association of American Geographers annual meeting, Pittsburgh, Pennsylvania (4 - 8 April, 2000).

#### **1999 Presentations**

Myint, S.W., (1999). Application of NOAA AVHRR and SeaWiFS reflectance measurements for the Detection and Quantification of Surface Suspended Sediments along a River Dominated Coast, Louisiana. Paper presented at the Southwestern Division of the Association of American Geographers (SWAAG) Meeting at the Southwest Texas State University (19 - 23 October, 1999).

#### **1998 Presentations**

Myint, S.W. (1998). Three Different Models for Mapping Salt Affected Soils Using Remote Sensing and GIS. Paper presented at the Fall Meeting for Southwestern Division of the Association of American Geographers (SWAAG) meeting at the Louisiana State University (29 - 31 October, 1998).

#### **1997 Presentations**

Myint, S.W., C. Thongthap, and A. Euimnoh(1997). Nutrient Depletion Modeling Using Remote Sensing and GIS: A Case Study in Chonburi, Thailand. Poster presented at the 18th Asian Conference on Remote Sensing, Kuala Lumpur (20 - 24 October, 1997). (Received the best poster presentation award).

#### **1996 Presentations**

Myint, S.W. (1996). Assessment and Monitoring of Coastal and Suspended Sediment Concentration and Vegetation Conditions. Paper presented at the third working group meeting for Coastal and Marine Environment Management Information System, Sanya, Hainan, China (27 - 29 August, 1996) (organized and sponsored by ADB and UNEP).

#### **1995 Presentations**

Myint, S.W. (1995). Assessment and Monitoring of Land Degradation and Desertification using Remote Sensing and GIS. Paper presented at the Asia-Pacific meeting on the follow-up to the international convention to combat Desertification, IBC, Ygn (10 - 13 April 1995) (organized and sponsored by ESCAP/UNDP/UNEP).