Jangho Lee

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Research Interests	Atmospheric Informatics, Downscaling, Climate Impact, Land-Vegetation-Atmosphere Modelling, Remote Sensing, Urban Climate, ML/DL, Atmospheric Data Analysis	
Education	2018 - 2023	**Texas A&M University** **Ph.D.** in Atmospheric Sciences
	2011 - 2018	**Seoul National University** **B.S.** in Earth and Environmental Sciences
Research Experience	2023 - Present	**University of Illinois Chicago** *CROCUS Postdoctoral Researcher* • Community Research on Climate and Urban Science (CROCUS) • Urban remote sensing, urban data analysis, downscaling • Land-Vegetation-Atmosphere modelling (E3SM & ELM)
	2018 - 2023	**Texas A&M University** *Graduate Research Assistant* • Climate impact analysis, data analysis, extreme weather analysis • Remote sensing, machine learning, deep learning
	2014 - 2018	**Seoul National University** *Undergraduate Intern* • Statistical climatology
Other Experiences	2012 - 2014	**Republic of Korea Army** *Drill Sergeant in Korea Army Training Center*
Publications		

1. **Lee, J.** (2024). Assessment of U.S. Urban Surface Temperature using GOES-16 and 17 Data: Urban Heat Island and Temperature Inequality. *Weather, Climate, and Society,* [In Press]

2. **Lee, J**., Berkelhammer, M., Wilson, M. D., Love, N., & Cintron, R. (2024). Urban Land Surface Temperature Downscaling in Chicago: Addressing Ethnic Inequality and Gentrification. *Remote Sensing*, 16(9), 1639

3. **Lee. J**., & Hu, M. (2024). Effect of Environmental and Socioeconomic Factors on Increased Early Childhood Blood Lead Levels: A Case Study in Chicago. *International Journal of Environmental Research and Public Health*, 21, 383

4. **Lee, J.**, & Dessler, A. E. (2024). Improved Surface Urban Heat Impact Assessment Using GOES Satellite Data: A Comparative Study With ERA-5. *Geophysical Research Letters*, 51(1), e2023GL107364.

5. **Lee, J.**, & Dessler, A. E. (2023). Future Temperature-Related Deaths in the US: The Impact of Climate Change, Demographics, and Adaptation. *GeoHealth*, *7*(8), e2023GH000799.

6. **Lee, J.**, & Dessler, A. E. (2022). The Impact of Neglecting Climate Change and Variability on ERCOT's Forecasts of Electricity Demand in Texas. *Weather, Climate, and Society*, *14*(2), 499-505.

7. **Lee, J.**, Mast, J. C., & Dessler, A. E. (2021). The Effect of Forced Change and Unforced Variability in Heat Waves, Temperature Extremes, and Associated Population Risk in a CO_2-Warmed World. *Atmospheric Chemistry and Physics*, *21*(15), 11889-11904.

8. **Lee, J.**, Shi, Y. R., Cai, C., Ciren, P., Wang, J., Gangopadhyay, A., & Zhang, Z. (2021). Machine Learning Based Algorithms for Global Dust Aerosol Detection from Satellite Images: Inter-Comparisons and Evaluation. *Remote Sensing*, *13*(3), 456.

9. **Lee, J.**, & Kim, K. Y. (2018). Analysis of Source Regions and Meteorological Factors for the Variability of Spring PM10 Concentrations in Seoul, Korea. *Atmospheric Environment*, *175*, 199-209.

10. **Lee, J.** (2017). Future Trend in Seasonal Lengths and Extreme Temperature Distributions over South Korea. *Asia-Pacific Journal of Atmospheric Sciences*, *53*, 31-41.

Seminars & Invited Talks	1. [Invited Talk: 2024, Florida State University] Urban Land Surface Temperatures: Importance, Measurements, and Multidisciplinary Applications
	2. [Invited Talk: 2024, University of Illinois Chicago] Urban Land Surface Temperatures: Importance, Measurements, and Multidisciplinary Applications
	3. [Invited Talk: 2024, Seoul National University] Urban LST Downscaling in Chicago: Addressing Socioeconomic Disparities
	4. [Department Seminar: 2022, Texas A&M University] Future Temperature Related Deaths in the US: The Impact of Climate Change, Demographics, and Adaptation

Awards & Scholarships	[2022] Outstanding Graduate Student Research Award	*Texas A&M University*
	[2021] Outstanding Graduate Student Seminar Award	*Texas A&M University*
	[2017] Best Thesis Award	*Seoul National University*
	[2011, 2015, 2016, 2017] Merit-based Scholarship	*Seoul National University*