Weikang Qian

Ph.D. candidate in Geography
focusing on extreme events, remote sensing, and AI for Earth Science

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Education

08/2022 – *present*	*Ph. D.* student in Geography, University of Florida (UF), US
	Dissertation: Quantifying the Contributions of Environmental Variables to Severe Convective Storms (SCS) Evolution: A Data-Driven Approach
09/2018 – 06/2021	*M.S.* – Physical Geography, East China Normal University (ECNU), CN
	Thesis: Spatiotemporal characteristics and influencing factors of extreme precipitation during typhoon season in coastal areas of southeast China
09/2014 – 06/2018	*B.S.* – Geographical Science, ECNU, CN

Publications

[1] **Qian, W.**, Wen, Y., Gao, S., Li, Z., Kisembe, J., & Jing, H. (2025). *Evaluation of near-surface specific humidity and air temperature from Atmospheric Infrared Sounder (AIRS) over oceans*. Earth and Space Science, 12(4), e2024EA003856.

[2] Zhang, O., Grissom, B., Pulido, J., Munoz-Ordaz, K., He, J., Cham, M., Jing, H., **Qian, W.**, Wen, Y., and Wang, J. (2024). Accurate and Interpretable Radar Quantitative Precipitation Estimation with Symbolic Regression. In *2024 IEEE International Conference on Big Data (BigData)* (pp. 2254-2263). IEEE.

[3] Kisembe, J., Li, J. L. F., Wen, Y., Lee, W. L., **Qian, W.**, Li, Z., & Jiang, J. H. (2024). Assessing the impacts of falling ice radiative effects on the seasonal variation of land surface properties. *Journal of Geophysical Research: Atmospheres*, *129*(15), e2024JD040991.

[4] Jing, H., Li, Z., Wen, Y., Gao, S., Wang, Y., **Qian, W.**, & Kisembe, J. (2024). Changes in Convective Precipitation Reflectivity over the CONUS Revealed by High-Resolution Radar Observations from 2015 to 2021. *Atmosphere*, *15*(6), 627.

[5] **Qian, W.**, Sun, X., & Li, C. (2022). Spatial effects on extreme precipitation in the coastal areas of southeastern China during the raining season. *International Journal of Climatology*, 42(10), 5142–5158. https://doi.org/10.1002/joc.7524

[6] Wang, Y., Wang, D., Qiu, S., **Qian, W**. (2017). Investigation on concentrations and spatial distribution characteristics of heavy metals in human hair of residents in Shanghai City. *Acta Scientiae Circumstantiae*. 37(03),1139-1145 DOI:10.13671/j.hjkxxb.2016.0236 (in Chinese)

Conferences

[1] **Qian, W.**, Wen, Y., Farahmand, A., & Kisembe, J. (2024, April). Understanding the Causalities between Multiple Environmental Variables and Droughts in Amazon Basin. In *EGU General Assembly Conference Abstracts* (p. 12984).

[2] **Qian, W.**, Wen, Y., Gao, S., Li, Z., Kisembe, J., & Jing, H. (2023, December). Improving Early-warning Tornado Forecast Based on Environmental Variables Using Symbolic Deep Learning. In *AGU Fall Meeting Abstracts* (Vol. 2023, pp. H21C-06).

[3] Dao, T., Wen, Y., Li, Z., **Qian, W.**, Tzeng, M. D., Yu, T. Y., & Bodine, D. J. (2023, December). Intercomparison of ground-based RaXPol mobile radar and WSR-88D operational radar with the GPM spaceborne radar during Hurricane Ian. In *AGU Fall Meeting Abstracts* (Vol. 2023, No. 2393, pp. A31B-2393).

[4] **Qian, W.**, & Sun, X. (2021, April). Spatio-temporal effects on extreme precipitation in the coastal areas of southeast China. In *EGU General Assembly Conference Abstracts* (pp. EGU21-2043).

[5] **Qian, W.**, & Sun, X. (2019, October) Climate effects on the frequency of extreme precipitation during raining season in south-east coastal areas of China. In *The 10th edition of the International Workshop on Statistical Hydrology* (pp. S02-O-PM1-104-12).

Awards & Honors

- the Seventh Round of The IPCC Scholarship Awards (2023-2024)

Experiences

08/2024 - *present*	Graduate Teaching Assistant, Department of Geography, UF, FL, US
	- MET 1010 - Introduction to weather and climate (Instructor)
	- GEO 2242 - Extreme weather (online, Instructor)
08/2022 - 07/2024	Graduate Researching Assistant, Department of Geography, UF, FL, US
04/2021 - 07/2022	Water Treatment Engineer, WaterInsight, SH, CN
	- Preliminary Design of Automatic Precipitant Dosing System for Water Treatment
09/2021 - 03/2021	Administrative Assistant, School of Geographic Sciences, ECNU, SH, CN

Workshop & Other Activities

04/2023 - 06/2023	NASA Openscapes Champions Cohort
09/2022	RaXPol Mobile Radar Field Deployment for Hurricane Ian

Programming Skills

Python, R