Curriculum Vitae

YIXIN "BERRY" WEN

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Education

Ph. D. 2015	**Meteorology**, University of Oklahoma, Norman, OK, USA *Towards Improved QPE by Capitalizing Ground- and Space- Based Precipitation Measurements*
M.S. 2012	**Geoinformatics**, University of Oklahoma, Norman, OK, USA *Creating Synergy Between Ground- and Space-Based Precipitation Measurements*
B.S. 2006	**Ecology**, East China Normal University, Shanghai, China *Pollution, Economy and Regulations: Environmental Kuznets Curve in Shanghai, China*

Professional Experience

Jan. 2022 – Present	**Assistant Professor,** Department of Geography, University of Florida
Nov. 2017 – Dec. 2021	**Research Scientist,** NOAA/National Severe Storms Laboratory Cooperative Institute for Mesoscale Meteorological Studies, Norman, OK
Dec. 2015 – Oct. 2017	**Postdoctoral Research Associate,** NASA/Jet Propulsion Laboratory California Institute of Technology, Pasadena, CA
May 2015 – Dec. 2015	**Postdoctoral Research Associate,** NOAA/NSSL NOAA/University of Oklahoma Cooperative Institute, Norman, OK
Aug. 2009 – May 2015	**Research Assistant**, National Weather Center, University of Oklahoma
Sep. 2007 – Aug. 2009	**Visiting Researcher,** Department of Microbiology & Plant Biology University of Oklahoma, Norman, OK

Research Interests

- Radar and satellite remote sensing, retrieval, validation and application in Meteorology and Hydrology
- Machine learning and deep learning
- Long-term climate data analysis, extreme events and natural hazards

Professional Activities

- Editor, *JGR: Machine Learning and Computation* (new AGU journal)
- Chair, User Working Group at NASA Goddard Earth Sciences Data and Information Services Center
- Organizer, AGU Special Collection "Advances in Machine Learning for Earth Science: Observation, modeling, and Applications" on *Earth and Space Science*, *Water Resources Research* and *JGR: Atmospheres*.
- Academic editor, *Remote Sensing*, Special Issue on "Remote Sensing Precipitation Measurement, Validation, and Applications".
- Academic editor, *Remote Sensing*, Special Issue on "Atmospheric Applications of polarimetric radar"
- Openscapes Champions Lesson Series, Apr-Jun 2023, doi.org/10.5281/zenodo.7407246
- Invited Reviewer, NASA ROSES proposal review panel (2019, 2023, and 2024).

Students/Postdoctoral Research Associates Supervised

- Postdoctoral Research Associate: Erica Griffin, Shang Gao
- Students: Taozhong Huang, Zhi Li, Theresa Tsoodle Yellowbear, Haotong Jing, Jesse Kisembe, Weikang Qian, Ronald Odongo, Tan Dao, Aidan Winney, Olivia Zhang, Tomas Bayona
- JPL summer interns, Barry Martinez (2016 Summer), Gabriela Martinez (2017 Summer)

Referred Journal Articles (* corresponding)

1. Sun, Y., **Wen, Y.** *, and Yang, H*. (2026). ReSearch: A Multi-Stage Machine Learning Framework for Earth Science Data Discovery, https://haizhaoyang.github.io/publications/Geo-ReSearch.pdf

2. Yan, S., Chen, M., Li, Z., **Wen, Y.**, et al. (2026). AI Agent for Hydrologic Modeling: Definition, Development, and Application. *Geophysical Research Letters*. https://doi.org/10.13140/RG.2.2.34824.48643

3. Yan, S., Chen, M., Zhu, S., **Wen, Y.**, et al. (2026). AQUAH: Automatic Quantification and Unified Agent in Hydrology. https://arxiv.org/abs/2508.02936.

4. Kisembe, J., **Wen, Y.*,** Wainwright, C., Odongo, R., Qian, W., (2026), Contrasting Changes in Rainy Season Length,Rainfall Frequency,and Intensity across Eastern Africa, accepted by *Journal of Hydrometeorology,* doi: 10.1175/JHM-D-25-0080.1

5. Liu, Z. and **Wen, Y.** (2025). Accelerating Earth Science to Action. *Bull. Amer. Meteor. Soc.,* **106**, E2043–E2051, https://doi.org/10.1175/BAMS-D-24-0226.1.

6. Camporeale, E., Marino, R., Rundle, J. B., Folini, D., Chen, Y., Lucas, D. D., Li, X., Berger, T. E., Fox, G. C., **Wen, Y**., Shen, C., Wentzcovitch, R. M., & Fox, G. C. (2025). The First 18 Months of JGR: MLC. Journal of Geophysical Research: Machine Learning and Computation, 2(2). https://doi.org/10.1029/2

7. Mei, J., Yong, B., Lyu, Y., Qi, W., **Wen, Y**., Wang, G., & Zhang, J. (2025). Runoff evolution responses to climate change: A case study in the headwater area of Yellow River, China. Journal of Environmental Management, 384, 125512. https://doi.org/10.1016/J.JENVMAN.2025.125512

8. Liu, W., Li, S., Fan, D., **Wen, Y.**, Madson, A., & Mitchell, J. (2025). A deep-learning workflow for CORONA-based historical land use classifications. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 18*, 16066–16080. https://doi.org/10.1109/JSTARS.2025.3582789

9. 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*. Advance online publication. https://doi.org/10.1029/2024EA003856

10. Rahaman M, Southworth J, **Wen Y.**, Keellings D. Assessing Model Trade-Offs in Agricultural Remote Sensing: A Review of Machine Learning and Deep Learning Approaches Using Almond Crop Mapping. *Remote Sensing*. 2025; 17(15):2670. https://doi.org/10.3390/rs17152670

11. Mei, J., Yong, B., Lyu, Y., Qi, W., **Wen, Y.**, Wang, G., & Zhang, J. (2025). Runoff evolution responses to climate change: A case study in the headwater area of Yellow River, China. *Journal of Environmental Management, 384*, 125512. https://doi.org/10.1016/j.jenvman.2025.125512

12. Zhu, S., Li, Z., Chen, M., **Wen, Y.,** Liu, Z., Huffman, G. J., Tsoodle, T. E., Ferraro, S. C., Wang, Y., & Hong, Y. (2025). Evaluation of IMERG climate trends over land in the TRMM and GPM eras. *Environmental Research Letters*, *20*(1), 014064. https://doi.org/10.1088/1748-9326/AD984E

13. Song, J., Qi, W., Lyu, Y., Zhang, H., Song, Y., Shi, T., **Wen, Y.** , & Yong, B. (2024). Detecting the Vertical Structure of Extreme Precipitation in the Headwater Area of Yellow River Using the Dual-Frequency Precipitation Radar Onboard the Global Precipitation Measurement Mission. *International Journal of Climatology*, *44*(16), 5918-5933. https://doi.org/10.1002/JOC.8675

14. Zhang, O. , Grissom, B., Pulido, J., Munoz-Ordaz, K., He, J., Cham, M., Jing, H., Qian, W., **Wen, Y.*** , & Wang, J. (2024). Accurate and Interpretable Radar Quantitative Precipitation Estimation with Symbolic Regression. *IEEE International Conference on Big Data (BigData)*, 2254-2263. https://doi.org/10.1109/BIGDATA62323.2024.10825069

15. Zhu, S., Li, Z., Chen, M., **Wen, Y.,** Gao, S., Zhang, J., Wang, J., Nan, Y., Ferraro, S. C., Tsoodle, T. E., & Hong, Y. (2024). How has the latest IMERG V07 improved the precipitation estimates and hydrologic

utility over CONUS against IMERG V06? *Journal of Hydrology*, *645*, 132257. https://doi.org/10.1016/J.JHYDROL.2024.132257

16. Li, Z. , Tsoodle, T., Chen, M., Gao, S., Zhang, J., **Wen, Y.,** Yang, T., King, F. N., & Hong, Y. (2024). Future Heavy Rainfall and Flood Risks for Native Americans under Climate and Demographic Changes: A Case Study in Oklahoma. *Weather, Climate, and Society*, *16*(1), 143-154. https://doi.org/10.1175/WCAS-D-23-0005.1
17. 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. https://doi.org/10.3390/ATMOS15060627
18. 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). https://doi.org/10.1029/2024JD040991
19. Liu, Z., **Wen, Y**., Mantas, V. & Meyer, D**.** (2023). We Need a Better Way to Share Earth Observations. *Eos Transactions American Geophysical Union [00963941]*, *104*. https://doi.org/10.1029/2023EO230190
20. Li, Z. , **Wen, Y.** *, Liao, L., Wolff, D., Meneghini, R., & Schuur, T. J. (2023). Joint Collaboration on Comparing NOAA’s Ground-Based Weather Radar and NASA–JAXA’s Spaceborne Radar. *Bulletin of the American Meteorological Society*, *104*(8), E1435-E1451. https://doi.org/10.1175/BAMS-D-22-0127.1
21. Gao, S. , **Wen, Y.** *, Fishbein, E., Lambrigtsen, B., Zhang, J., Van Dang, H., & Galli, C. (2023). Ground-Validation and Error Attribution of Near-Surface Air Temperature From AIRS in North America. *Earth and Space Science*, *10*(6). https://doi.org/10.1029/2022EA002658
22. Weber, M., Hondl, K., Yussouf, N., Jung, Y., Stratman, D. R., Putnam, B., Wang, X., Schuur, T. J., Kuster, C. M., **Wen, Y.,** Sun, J., Keeler, J., Ying, Z., Cho, J., Kurdzo, J., Torres, S. M., Curtis, C. D., Schvartzman Cohenca, D., Boettcher, J., ...Mirkovic, D. (2023). Future U.S. Operational Weather Radar: Opportunities and Challenges for Its Next Generation. *Bulletin of the American Meteorological Society*, *104*(2), 99-102. https://doi.org/10.1175/BAMS-D-20-0067.A
23. Li, Z. , Xue, X., Clark, R., Vergara Arrieta, H., Gourley, J., Tang, G., Shen, X., Kan, G., Zhang, K., Wang, J., Chen, M., Gao, S., Zhang, J., Yang, T., **Wen, Y.,** Kirstetter, P. E., & Hong, Y. (2023). A decadal review of the CREST model family: Developments, applications, and outlook. *Journal of Hydrology X*, *20*, 100159. https://doi.org/10.1016/J.HYDROA.2023.100159
24. Li, Z. , Gao, S., Chen, M., Zhang, J., Gourley, J. J., **Wen, Y.,** Yang, T., & Hong, Y. (2023). Introducing Flashiness-Intensity-Duration-Frequency (F-IDF): A New Metric to Quantify Flash Flood Intensity. *Geophysical Research Letters*, *50*(23). https://doi.org/10.1029/2023GL104992
25. Chen, M., Huang, Y., Li, Z., Larico, A. J., Xue, M., Hong, Y., Hu, X., Novoa, H. M., Martin, E. R., Mc Pherson, R. A., Zhang, J., Gao, S., **Wen, Y.,** Perez, A. V., & Morales, I. Y. (2022). Cross-Examining Precipitation Products by Rain Gauge, Remote Sensing, and WRF Simulations over a South American Region across the Pacific Coast and Andes. *Atmosphere*, *13*(10), 1666. https://doi.org/10.3390/ATMOS13101666
26. Kalmus, P., Nguyen, H., Roman, J., Wang, T., Yue, Q., **Wen, Y.,** Hobbs, J., & Braverman, A. (2022). Data Fusion of AIRS and CrIMSS Near Surface Air Temperature. *Earth and Space Science*, *9*(10). https://doi.org/10.1029/2022EA002282
27. Li, Z. +, Chen, M., Gao, S., **Wen, Y.,** Gourley, J. J., Yang, T., Kolar, R. L., & Hong, Y. (2022). Can re-infiltration process be ignored for flood inundation mapping and prediction during extreme storms? A

case study in Texas Gulf Coast region. *Environmental Modelling and Software*, *155*, 105450. https://doi.org/10.1016/J.ENVSOFT.2022.105450

28. Li, Z., Tang, G., Kirstetter, P. E., Gao, S., Li, J.-L., **Wen, Y.** *, & Hong, Y. * (2022). Evaluation of GPM IMERG and its Constellations in Extreme Events over the Conterminous United States. *Journal of Hydrology*, *606*, 127357. https://doi.org/10.1016/J.JHYDROL.2021.127357

29. Li, Z. , Chen, M., Gao, S., Luo, X., Gourley, J. J., Kirstetter, P. E., Yang, T., Kolar, R. L., Mcgovern, A., **Wen, Y.,** Rao, B., Yami, T., & Hong, Y. (2021). CREST-iMAP v1.0: A fully coupled hydrologic-hydraulic modeling framework dedicated to flood inundation mapping and prediction. *Environmental Modelling and Software*, *141*, 105051. https://doi.org/10.1016/J.ENVSOFT.2021.105051

30. Weber, M., Hondl, K., Yussouf, N., Jung, Y., Stratman, D. R., Putnam, B., Wang, X., Schuur, T. J., Cooley, K., Kuster, C. M., Istok, M., **Wen, Y.,** Zhang, G., Palmer, R. D., Sun, J., Keeler, J., Ying, Z., Cho, J., Kurdzo, J., ...Mirkovic, D. (2021). Towards the Next Generation Operational Meteorological Radar. *Bulletin of the American Meteorological Society*, *102*(7), E1357-E1383. https://doi.org/10.1175/BAMS-D-20-0067.1

31. **Wen, Y.** *, Schuur, T. J., Vergara Arrieta, H., & Kuster, C. M. (2021). Effect of Precipitation Sampling Error on Flash Flood Monitoring and Prediction: Anticipating Operational Rapid-Update Polarimetric Weather Radars. *Journal of Hydrometeorology*. https://doi.org/10.1175/JHM-D-19-0286.1

32. Li, Z. , Tang, G., Hong, Z., Chen, M., Gao, S., Kirstetter, P. E., Gourley, J. J., **Wen, Y.,** Yami, T., Nabih, S., & Hong, Y. (2021). Two-decades of GPM IMERG early and final run products intercomparison: Similarity and difference in climatology, rates, and extremes. *Journal of Hydrology*, *594*, 125975. https://doi.org/10.1016/J.JHYDROL.2021.125975

33. Li, Z. , **Wen, Y.** *, Schreier, M., Behrangi, A., Hong, Y., & Lambrigtsen, B. (2021). Advancing Satellite Precipitation Retrievals with Data Driven Approaches: Is black box model explainable? *Earth and Space Science*, *8*(2). https://doi.org/10.1029/2020EA001423

34. Coffer, B., Kubacki, M., **Wen, Y.,** Zhang, T., Barajas, C. A., & Gobbert, M. K. (2021). Machine Learning with Feature Importance Analysis for Tornado Prediction from Environmental Sounding Data. *PAMM*, *20*(1). https://doi.org/10.1002/PAMM.202000112

35. Li, Z. , Chen, M., Gao, S., Hong, Z., Tang, G., **Wen, Y.,** Gourley, J. J., & Hong, Y. (2020). Cross-Examination of Similarity, Difference and Deficiency of Gauge, Radar and Satellite Precipitation Measuring Uncertainties for Extreme Events Using Conventional Metrics and Multiplicative Triple Collocation. *Remote Sensing*, *12*(8), 1258. https://doi.org/10.3390/RS12081258

36. **Wen, Y.** *, Behrangi, A., Chen, H., & Lambrigtsen, B. (2018). How well were the early 2017 California Atmospheric River precipitation events captured by satellite products and ground-based radars? *Quarterly Journal of the Royal Meteorological Society*, *144*(S1), 344-359. https://doi.org/10.1002/QJ.3253

37. Lambrigtsen, B., Dang, H. V., Turk, F. J., Hristova-Veleva, S. M., Su, H.**, & Wen, Y.** (2018). All-Weather Tropospheric 3-D Wind From Microwave Sounders. *Selected Topics in Applied Earth Observations and Remote Sensing, IEEE*, *11*(6), 1949-1956. https://doi.org/10.1109/JSTARS.2018.2814540

38. Gou, Y., Ma, Y., Chen, H.**, & Wen, Y.** (2018). Radar-derived quantitative precipitation estimation in complex terrain over the eastern Tibetan Plateau. *Atmospheric Research*, *203*, 286-297. https://doi.org/10.1016/J.ATMOSRES.2017.12.017

39. Yanovsky, I., **Wen, Y.,** Behrangi, A., Schreier, M., & Lambrigtsen, B. (2018). Validating Enhanced Resolution of Microwave Sounder Imagery Through Fusion with Infrared Sensors| Data. *IEEE Specialist Meeting on Microwave Radiometry and Remote Sensing of the Environment (MicroRad) [Conference]*, 1-5. https://doi.org/10.1109/MICRORAD.2018.8430703

40. Behrangi, A.**, & Wen, Y.** (2017). On the Spatial and Temporal Sampling Errors of Remotely Sensed Precipitation Products. *Remote Sensing*, *9*(11), 1127. https://doi.org/10.3390/RS9111127

41. Zhong, L., Yang, R., **Wen, Y.,** Chen, L., Gou, Y., Li, R., Zhou, Q., & Hong, Y. (2017). Cross-evaluation of reflectivity from the space-borne precipitation radar and multi-type ground-based weather radar network in China. *Atmospheric Research*, *196*, 200-210. https://doi.org/10.1016/J.ATMOSRES.2017.06.016

42. Yanovsky, I., Behrangi, A., **Wen, Y.,** Schreier, M., Dang, V., & Lambrigtsen, B. (2017). Enhanced Resolution of Microwave Sounder Imagery through Fusion with Infrared Sensor Data. *Remote Sensing*, *9*(11), 1097. https://doi.org/10.3390/RS9111097

43. Tang, G., Zeng, Z., Ma, M., Liu, R., **Wen, Y.**, & Hong, Y. (2017). Can Near-Real-Time Satellite Precipitation Products Capture Rainstorms and Guide Flood Warning for the 2016 Summer in South China? *IEEE Geoscience and Remote Sensing Letters*, *14*(8), 1208-1212. https://doi.org/10.1109/LGRS.2017.2702137

44. Zhong, L., Yang, R., Chen, L., **Wen, Y.,** Li, R., Tang, G., & Hong, Y. (2017). Combined Space and Ground Radars for Improving Quantitative Precipitation Estimations in the Eastern Downstream Region of the Tibetan Plateau. Part I: Variability in the Vertical Structure of Precipitation in ChuanYu Analyzed from Long-Term Spaceborne Observations by TRMM PR. *Journal of Applied Meteorology and Climatology*, *56*(8), 2259-2274. https://doi.org/10.1175/JAMC-D-16-0382.1

45. Yanovsky, I., Behrangi, A., Schreier, M., Dang, V., **Wen, Y.**, & Lambrigtsen, B. (2017). Fusion of microwave and infrared data for enhancing its spatial resolution. *IGARSS - IEEE International Geoscience and Remote Sensing Symposium [Conference]*, 2625-2628. https://doi.org/10.1109/IGARSS.2017.8127533

46. **Wen, Y.,** Kirstetter, P. E., Gourley, J. J., Hong, Y., Behrangi, A., & Flamig, Z. (2017). Evaluation of MRMS snowfall products over the western United States. *Journal of Hydrometeorology*, *18*(6), 1707-1713. https://doi.org/10.1175/JHM-D-16-0266.1

47. Tang, G. , **Wen, Y.,** Gao, J., Long, D., Ma, Y., Wan, W., & Hong, Y. (2017). Similarities and differences between three coexisting spaceborne radars in global rainfall and snowfall estimation. *Water Resources Research*, *53*(5), 3835-3853. https://doi.org/10.1002/2016WR019961

48. **Wen, Y.,** Behrangi, A., Lambrigtsen, B., & Kirstetter, P. E. (2016). Evaluation and Uncertainty Estimation of the Latest Radar and Satellite Snowfall Products Using SNOTEL Measurements over Mountainous Regions in Western United States. *Remote Sensing*, *8*(11), 904. https://doi.org/10.3390/RS8110904

49. **Wen, Y.,** Kirstetter, P. E., Hong, Y., Gourley, J. J., Cao, Q., Zhang, J., Flamig, Z., & Xue, X. (2016). Evaluation of a Method to Enhance Real-Time, Ground Radar–Based Rainfall Estimates Using Climatological Profiles of Reflectivity from Space. *Journal of Hydrometeorology*, *17*(3), 761-775. https://doi.org/10.1175/JHM-D-15-0062.1

50. **Wen, Y.,** Hong, Y., Kirstetter, P. E., Cao, Q., Gourley, J. J., Zhang, J., Xue, X., & Wen, Y. (2014). Systematical evaluation of VPR- Identification and Enhancement (VPR-IE) approach for different precipitation types. *SPIE Asia Pacific Remote Sensing Conference*, *9259*, 92590C. https://doi.org/10.1117/12.2069334

51. Cao, Q., **Wen, Y.,** Hong, Y., Gourley, J. J., & Kirstetter, P. E. (2014). Enhancing Quantitative Precipitation Estimation Over the Continental United States Using a Ground-Space Multi-Sensor Integration Approach. *IEEE Geoscience and Remote Sensing Letters*, *11*(7), 1305-1309. https://doi.org/10.1109/LGRS.2013.2295768

52. **Wen, Y.,** Cao, Q., Kirstetter, P. E., Hong, Y., Gourley, J. J., Zhang, J., Zhang, G., & Yong, B. (2013). Incorporating NASA Spaceborne Radar Data into NOAA National Mosaic QPE System for Improved Precipitation Measurement: A Physically Based VPR Identification and Enhancement Method. *Journal of Hydrometeorology*, *14*(4), 1293-1307. https://doi.org/10.1175/JHM-D-12-0106.1

53. Yong, B., Ren, L., Hong, Y., Gourley, J. J., Tian, Y., Huffman, G. J., Chen, X., Wang, W.**, & Wen, Y.** (2013). First evaluation of the climatological calibration algorithm in the real-time TMPA precipitation estimates over two basins at high and low latitudes. *Water Resources Research*, *49*(5), 2461-2472. https://doi.org/10.1002/WRCR.20246

54. Cao, Q., Hong, Y., Qi, Y., **Wen, Y.,** Zhang, J., Gourley, J. J., & Liao, L. (2013). Empirical conversion of the vertical profile of reflectivity from Ku-band to S-band frequency. *Journal of Geophysical Research: Atmospheres*, *118*(4), 1814-1825. https://doi.org/10.1002/JGRD.50138

55. Cao, Q., Hong, Y., Gourley, J. J., Qi, Y., Zhang, J., **Wen, Y.**, & Kirstetter, P. E. (2013). Statistical and Physical Analysis of the Vertical Structure of Precipitation in the Mountainous West Region of the United States Using 11+ Years of Spaceborne Observations from TRMM Precipitation Radar. *Journal of Applied Meteorology and Climatology*, *52*(2), 408-424. https://doi.org/10.1175/JAMC-D-12-095.1

56. **Wen, Y.,** Hong, Y., Zhang, G., Schuur, T. J., Gourley, J. J., Flamig, Z., Morris, K. R., & Cao, Q. (2011). Cross Validation of Spaceborne Radar and Ground Polarimetric Radar Aided by Polarimetric Echo Classification of Hydrometeor Types. *Journal of Applied Meteorology and Climatology*, *50*(7), 1389-1402. https://doi.org/10.1175/2011JAMC2622.1

57. **Wen, Y.,** Hong, Y., Zhang, G., Chen, S., Zhang, J., Gourley, J. J. (2011). Incorporating NASA space-borne precipitation research products into National Mosaic QPE operational system for improved precipitation measurements. *IEEE Radar Conference (RadarCon)*, 995-999. https://doi.org/10.1109/radar.2011.5960685

Book Chapters

1. Tang G., **Y. Wen**, Y. Zheng, D. Long and Y. Hong, From Tropical to Global Precipitation Measurement: Capacity Building for Sustainability and Resilience. Hydrologic Remote Sensing (pp. 1-15). doi: 10.1201/9781315370392-2 .
2. **Y. Wen**, Z. Wan, Y. Hong and J.J. Gourley, Advanced Radar Technologies for Quantitative Precipitation Estimation. Radar Hydrology: Principles, Models, and Applications (pp. 87-106), 1st ed., Boca Raton, CRC Press, 180pp
3. L. Jiang, Y. Qu, Y. Zhou, and **Y. Wen**, Soil Respiration and the Environment (Translated to Chinese version. Higher Education Press, China

Scientific Grants & Contracts

1. NSF 25-530 Collaborative Research: CAIG: Reliable Uncertainty-Aware Generative Downscaling for Geoscience Data (PI, $353,178, 10/1/2025 – 9/30/2028)
2. NASA FINNEST25, Delineating and Characterizing Dry Spell Events in the Horn of Africa (PI, $100,000, 9/14/2025 – 12/31/2027)
3. NASA NNH23ZDA001N-EEJ: A.47 Earth Action: Community Action for Equity and Environmental Justice, Building Co-Design and Co-Learning Digital Twins against Floods on Tribal Lands in support of Indigenous Communities (Co-I, $750,374, 10/01/2024-9/31/2027, with University of Oklahoma)
4. NASA Jet Propulsion Laboratory, California Institute of Technology A19-0075-001, Analysis of the performance of the Atmospheric Infrared Sounder (AIRS) retrieval system (PI, $140,000, 08/01/2018-09/31/2021)

5. University of Oklahoma Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) Director's Directed Research Fund, Understanding satellite-derived cloud properties using polarimetric classification of hydrometeor types from WSR-88D radars. (PI, $20,000)
6. NASA Oklahoma EPSCoR Research Initiation Grant, Development of a joint ground polarimetric radar and satellite database. (PI, $27,000, 06/01/2019-06/01/2021)

Conference Presentations

1. (Invited). **Wen, Y**., Synergy study of space-borne and ground-based radar observations aided by AI/ML, NASA Goddard GESTAR seminar, Greenbelt, Maryland, 14 March 2024
2. (Invited). **Wen, Y**. Cloud Computation: Ground validation of NASA GPM products in the cloud. NASA Goddard Earth Sciences Data and Information Services Center (GES DISC) User Working Group Annual F2F meeting, Greenbelt, Maryland, 22-27 September 2023
3. (Invited). **Wen, Y**. "Satellite Archaeology", Aucilla Research Institute Conference, Monticello, Florida 12-14 October 2023 (Local community)
4. Qian, W., **Wen, Y**., Farahmand, A. and Kisembe J., Understanding the Causalities between Multiple Environmental Variables and Droughts in Amazon Basin. No. EGU24-12984. Copernicus Meetings.
5. Dao T., **Wen Y**., Li Z., Qian W., Tzeng M-D., Yu, T.Y., Bodine, D., Intercomparison of ground-based RaXPol mobile radar and WSR-88D operational radar with the GPM spaceborne radar during Hurricane Ian, AGU, San Francisco, Dec. 13-18, 2023
6. Qian, W., **Wen, Y.,** Gao, S., Li, Z., Kisembe, J., Jing, H., Improving Early-warning Tornado Forecast Based on Environmental Variables Using Symbolic Deep Learning, AGU, San Francisco, Dec. 13-18, 2023
7. Kempler, L., **Y. Wen**, MATLAB for Cloud Computing. AGU, San Francisco, Dec. 13-18, 2023.
8. Z. Li, Y. Wen, M. Schreier, A. Behrangi, Y. Hong, B. Lambrigtsen, Explainable AI models for precipitation retrievals: a case study based on atmospheric sounding systems., AGU Fall Meeting, H25R-1229, New Orleans, Dec. 6-10, 2021.
8. E. Griffin, **Y. Wen**, T. Schuur, A. Ryzhkov, J. Krause, and Y. Hong, Evaluation of GPM DPR Surface Precipitation Type Identification, Using Ground-Based Polarimetric WSR-88D Radar and mPING Crowdsourcing Observations, AGU Fall Meeting, online, Dec. 13-18, 2020
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