

# Curriculum Vitae

## YIXIN “BERRY” WEN

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### Education

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

### Professional Experience

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

### Research Interests

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- 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

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- 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

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- Postdoctoral Research Associate: Erica Griffin, Shang Gao
  - Students: Taozhong Huang, Zhi Li, Theresa Tsoddle 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. 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>.
2. 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/10.1029/2024JC012202>
3. 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>
4. 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>
5. 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>
6. 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>
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.jenvmman.2025.125512>
8. Zhu, S., Li, Z., Chen, M., **Wen, Y.**, Liu, Z., Huffman, G. J., Tsoddle, 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>
9. 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>
10. 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>
11. Zhu, S., Li, Z., Chen, M., **Wen, Y.**, Gao, S., Zhang, J., Wang, J., Nan, Y., Ferraro, S. C., Tsoddle, 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>
12. Li, Z., Tsoddle, 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>
13. 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>

14. 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>
15. 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>
16. 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>
17. Gao, S., **Wen, Y.** \*, Fishbein, E., Lambrightsen, 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>
18. 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., Schwartzman 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>
19. 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>
20. 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>
21. 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>
22. 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>
23. Li, Z. <sup>+</sup>, 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>
24. 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>
25. 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>

26. Weber, M., Hndl, 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>
27. **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>
28. 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>
29. Li, Z. , **Wen, Y.** \*, Schreier, M., Behrangi, A., Hong, Y., & Lambrightsen, 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>
30. 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>
31. 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>
32. **Wen, Y.** \*, Behrangi, A., Chen, H., & Lambrightsen, 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>
33. Lambrightsen, 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>
34. 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>
35. Yanovsky, I., **Wen, Y.**, Behrangi, A., Schreier, M., & Lambrightsen, 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>
36. 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>
37. 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>
38. Yanovsky, I., Behrangi, A., **Wen, Y.**, Schreier, M., Dang, V., & Lambrightsen, 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>

39. 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>
40. 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 Chuan Yu 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>
41. 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>
42. **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>
43. 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>
44. **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>
45. **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>
46. **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>
47. 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>
48. **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>
49. 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>

50. 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>
51. 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>
52. **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>
53. **Wen, Y.**, Hong, Y., Zhang, G., Chen, S., Zhang, J., Gourley, J. J. (2011). Incorporating NASA spaceborne 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

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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

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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

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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
9. **Y. Wen**, J. Krause, B. Kahn, and T. Huang, The use of AIRS and polarimetric radar to monitor severe local storms: creating synergy between hyperspectral sounders and ground radars. NASA Sounder Science Team Meeting, Hyattsville, Maryland, Sep. 25-27, 2019
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