Wenhui Yan

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Education

China Agricultural University	*Beijing, China*
B.S. in Geographical Information Science	*Aug. 2021 – Jun. 2025*
China Agricultural University	*Beijing, China*
M.S. in Land Use and Information Technology	*Aug. 2025 – Jun. 2027*

Research Interests

Solar-induced chlorophyll fluorescence; Climate Change; Radiative transfer modeling

Publications

Escape Ratio Contributes More Than Fluorescence Yield to SIF GPP Relationship Over Crops and Rainforest
Wenhui Yan, Yelu Zeng, Xinhong Zhang, Weike Zhao, Yongyuan Gao, Yaohang He, Dalei Hao
IEEE Geoscience and Remote Sensing Letters, 2024

Tree-level carbon stock estimations across diverse species using multi-source remote sensing integration
Li Qing, Jia Yin, Xiaoxin Zhang, Dalei Hao, Matheus Pinheiro Ferreira, **Wenhui Yan**, Ye Tian, Da Zhang, Shen Tan, Shengn Nie, Tianyu An, Xiaoyao Li, Jianxi Huang, Wei Su, Yelu Zeng
Computers and Electronics in Agriculture, 2025

Mapping tree height in complex terrain of northern China using ultra-high-resolution images
Qing Li, Xiaoxin Zhang, Dalei Hao, **Wenhui Yan**, Qi Zhao, Ye Tian, Yelu Zeng
Smart Agricultural Technology, 2025

Global-PCG-10: a 10 m global map of plastic-covered greenhouses derived from Sentinel-2 in 2020
Bowen Niu, Quanlong Feng, Bingwen Qiu, Shuai Su, Xinmin Zhang, Rongji Cui, Xinhong Zhang, Fanli Sun, **Wenhui Yan**, Siyuan Zhao, Hanyu Shi, Cong Ou, Xiaolu Yan, Jianhua Gong, Gaofei Yin, Jianxi Huang, Jiantao Liu, Bingbo Gao, Xiaochuang Yao, Jianyu Yang, and Dehai Zhu
Earth System Science Data, 2025

Honors and Awards

Merit-based Tuition Scholarship, China Agricultural University	2026
Academic Excellence Scholarship, China Agricultural University	2026

Research & Technical Activities

Campus Applications and Optimization of Green Buildings under China's "Dual-Carbon" Targets	*2022*
Renewable Energy Innovation Competition	*Third Prize*

- Focused on energy efficiency analysis and low-carbon optimization strategies for campus-scale buildings.

Integrating Remote Sensing and Crop Models for Smart Cotton Irrigation in Xinjiang	*2023*
Esri China Cup – Remote Sensing Application Track	*Excellence Prize*

- Coupled satellite-based remote sensing indicators with crop growth models for smart irrigation decision support.
- Supported data-driven water management in arid agricultural regions.

Cliffside Grotto Art Through Time: A Geospatial Perspective	*2023*
Esri China Cup – Map Storytelling Track	*Third Prize*

- Developed an interactive geospatial storytelling project integrating maps, historical records, and visual narratives.
- Illustrated the spatial evolution and cultural significance of cliffside grotto art.

Mathematical modeling for applied agricultural and engineering problems	*2023*
China Agricultural University Mathematical Modeling Competition	*Third Prize*

- Developed mathematical models to analyze and solve applied agricultural and engineering problems.
- Emphasized model formulation, numerical analysis, and interdisciplinary collaboration.

Skills & Intersts

Programming: Python, MATLAB, R, JavaScript
Remote Sensing: OpenCV, GDAL, NumPy, Google Earth Engine, Radiative Transfer Models
Environment & Tools: Anaconda, Git, LaTeX
Languages: Maniarin(native);English(IELTS)

Instruments: ASD FieldSpec spectroradiometer, Hemispherical canopy photography, SPAD 502, Handheld infrared thermal sensorthermometer, etc.
Intersts: table tennis