Chao Zhang

Gender: Male **Date of Birth**: September 1, 1990

Place of birth: Zaozhuang City, Shandong Province, China

Home address: 16 West Cost Crescent, #03-04 1C, Singapore 128044

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Research Interests and Skills

Interests: Agricultural ecosystem monitoring and modeling, land-atmosphere interaction

Skills: Essential programming skills (Python, Matlab, C++)

Proficient English writing skills for peer-reviewed publications

Demonstrated experience of working with diverse collaborators in a group.

Work Experience

Position	Institute/Company	Period
Postdoc research fellow	National University of Singapore, Singapore	2023.12-now
Engineer	Jiangsu Power Design Institute Co., LTD., Nanjing, China	2016.07-2020.07

Education

Degree/Major	University/Institution	Period
PhD/Cartography and GIS	Institute of Geographic Sciences and Natural Resources Research, CAS, China	2020.09-2023.06
MA/Geodesy and survey engineering	Central South University, China	2013.09-2016.06
BA/Surveying and mapping	Central South University, China	2009.09-2013.06

Publications

[1] **Zhang, C.**, Dong, J.*, Leng, G., Doughty, R., Zhang, K., Han, S., Zhang, G., Zhang, X., Ge, Q.*, **2023**. Attenuated cooling effects with increasing water-saving irrigation: Satellite evidence from Xinjiang, China. *Agricultural and Forest Meteorology*. 333, 109397.

[2] **Zhang, C.**, Ge, Q.*, Dong, J.*, Zhang, X., Li, Y., Han, S., **2023**. Characterizing spatial, diurnal, and seasonal patterns of agricultural irrigation expansion-induced cooling in Northwest China from 2000 to 2020. *Agricultural and Forest Meteorology*. 330, 109304.

[3] **Zhang, C.**, Dong, J.*, Xie, Y., Zhang, X., Ge, Q.*, **2022**. Mapping irrigated croplands in China using a synergetic training sample generating method, machine learning classifier, and Google Earth Engine. *International Journal of Applied Earth Observation and Geoinformation*. 112, 102888.

[4] **Zhang, C.**, Dong, J., Ge, Q.*, **2022**. Mapping 20 years of irrigated croplands in China using

MODIS and statistics and existing irrigation products. *Scientific Data.* 9, 407.

[5] **Zhang, C.**, Dong, J.*, Ge, Q.*, **2022**. IrriMap_CN: Annual irrigation maps across China in 2000–2019 based on satellite observations, environmental variables, and machine learning. *Remote Sensing of Environment*. 280, 113184.

[6] **Zhang, C.**, Dong, J., Zuo, L., Ge, Q.*, **2022**. Tracking spatiotemporal dynamics of irrigated croplands in China from 2000 to 2019 through the synergy of remote sensing, statistics, and historical irrigation datasets. *Agricultural Water Management*. 263, 107458-107470.

[7] **Zhang, C.**, Dong, J.*, Ge, Q., **2022**. Quantifying the accuracies of six 30-m cropland datasets over China: A comparison and evaluation analysis. *Computers and Electronics in Agriculture*. 197, 106946.

[8] Cui, Y., Dong, J., **Zhang, C.**, et al. (2024). Validation and refinement of cropland map in southwestern China by harnessing ten contemporary datasets. *Scientific Data*, 11, 671.

[9] Cui, Y., Liu, R., Li, Z., **Zhang, C.**, et al. (2024). Decoding the inconsistency of six cropland maps in China. *The Crop Journal*, 12, 281-294.

Peer Reviewer For

Agricultural and Forest Meteorology, Biogeosciences, Science Bulletin, Agriculture, Atmosphere, Remote Sensing

Honors & Awards

2023, Outstanding Graduate Scholarship from IGSNRR, CAS.
2023, Outstanding students from CAS.
2022, First prize of President Scholarship from IGSNRR, CAS.
2021, Second prize of President Scholarship from IGSNRR, CAS.
2016, Excellent graduate of Hunan Province.
2015, First prize in “Zhong Haida” Scholarship at Central South University.
2014, First prize in “Chen Guoda” Scholarship at Central South University.

Membership

2024, 2023: Member of the American Geophysical Union.