

PhD candidate

Graduate Division of Earth and Atmospheric Sciences

The Chinese University of Hong Kong

Phone: (86)-159-2720-3603 E-mail: sunzhangyu@link.cuhk.edu.hk

Website: https://sun1753814280.github.io/personal_website.github.io/

EDUCATION**Graz University of Technology, Austria**

2024.01 - Present

Visiting PhD candidate in Remote Sensing and Photogrammetry

The Chinese University of Hong Kong, China

2021.09 - Present

PhD student in Earth and Atmospheric Sciences

Technical University of Munich, Germany

2019.10 – 2020.06

Double-degree Master in Earth Oriented Space Science and Technology

Wuhan University, China

2018.09 – 2021.06

Master in Geodesy and Geomatics, School of Geodesy and Geomatics

Wuhan University, China

2014.09 – 2018.06

Bachelor in Navigation Engineering, School of Geodesy and Geomatics

RESEARCH INTERESTS

- Rock glacier
- Deep learning
- Interferometric Synthetic Aperture Radar (InSAR)
- Photogrammetry

PUBLICATIONS

1. **Sun, Z.**, Hu, Y., Racoviteanu, A., Liu, L., Harrison, S., Wang, X., ... & Yuan, H. (2024). TPRoGI: a comprehensive rock glacier inventory for the Tibetan Plateau using deep learning. *Earth System Science Data Discussions*, 2024, 1-32.
2. **Sun, Z.**, Zhang, B., & Yao, Y. (2021). Improving the Estimation of Weighted Mean Temperature in China Using Machine Learning Methods. *Remote Sensing*, 13(5), 1016.
3. **Sun, Z.**, Zhang, B., & Yao, Y. (2019). An ERA5-based model for estimating tropospheric delay and weighted mean temperature over China with improved spatiotemporal resolutions. *Earth and Space Science*, 6(10), 1926-1941.
4. **Sun, Z.**, Zhang, B., & Yao, Y. (2019). A global model for estimating tropospheric delay and weighted mean temperature developed with atmospheric reanalysis data from 1979 to

2017. *Remote Sensing*, 11(16), 1893.

5. Yao, Y., **Sun, Z.**, & Xu, C. (2018). Establishment and Evaluation of a New Meteorological Observation-Based Grid Model for Estimating Zenith Wet Delay in Ground-Based Global Navigation Satellite System (GNSS). *Remote Sensing*, 10(11), 1718.
6. Yao, Y., **Sun, Z.**, Xu, C., Zhang, L., & Wan, Y. (2018). Development and Assessment of the Atmospheric Pressure Vertical Correction Model With ERA-Interim and Radiosonde Data. *Earth and Space Science*, 5(11), 777-789.
7. Yao, Y., **Sun, Z.**, Xu, C., Xu, X., & Kong, J. (2018). Extending a model for water vapor sounding by ground-based GNSS in the vertical direction. *Journal of Atmospheric and Solar-Terrestrial Physics*, 179, 358-366.

CONFERENCES

1. **Sun, Z.**, Liu, L., Hu, Y., & Fan, C. (2024). Assessing rock glacier velocities on the Tibetan Plateau using satellite SAR interferometry (No. EGU24-3349). Copernicus Meetings.
2. **Sun, Z.**, Hu, Y., Liu, L., Racoviteanu, A., & Harrison, S. (2023). Mapping and inventorying rock glaciers on the Tibetan Plateau from Planet Basemaps using deep learning (No. EGU23-6816). Copernicus Meetings.
3. **Sun, Z.**, Hu, Y., Liu, L., Racoviteanu, A., & Harrison, S. (2022, December). Mapping Rock Glaciers on the Tibetan Plateau from Planet Basemaps Using Deep Learning. In Fall Meeting 2022. AGU.

HONORS AND AWARDS

- Ernst Mach Grant fellowship 2023
- Hong Kong PhD Fellowship 2021
- National Graduate Scholarship of China 2019
- Leijun Scholarship, Wuhan University 2019
- Outstanding Graduate Student, Wuhan University 2019
- Outstanding Undergraduate Student, Wuhan University 2018
- Lei Jun Scholarship, Wuhan University 2017
- Yu Gang Song Xiao Scholarship, Wuhan University 2016
- National Scholarship of China 2015