Zhangyu SUN

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EDUCATION

The Chinese University of Hong Kong, Hong Kong, China *2021.09 - 2025.08*
Ph.D. in Earth and Atmospheric Sciences
Thesis Title: A Comprehensive Study of Rock Glacier Distribution, Velocities, and Water Storage in High Mountain Asia
Thesis advisor: Lin LIU

Graz University of Technology, Graz, Austria *2024.01 - 2024.06*
Visiting Ph.D. student in Remote Sensing and Photogrammetry

Wuhan University, Wuhan, China *2018.09 - 2021.06*
Master in Geodesy and Geomatics
Thesis Title: Global Modelling of High-Accuracy Tropospheric Key Parameters Based on ERA5 Data
Thesis advisor: Yibin YAO

Technical University of Munich, Munich, Germany *2019.10 - 2020.06*
Double-degree Master in Earth Oriented Space Science and Technology

Wuhan University, Wuhan, China *2014.09 - 2018.06*
Bachelor in Navigation Engineering

RESEARCH INTERESTS

Geodesy and Remote Sensing for Rock Glacier Monitoring
Atmospheric Error Modeling and Correction for Geodesy Technologies
Machine/Deep Learning for Remote Sensing and Geodesy Applications

SELECTED PUBLICATIONS

1. **Zhangyu Sun**, Yan Hu, Adina Racoviteanu, Lin Liu, Stephan Harrison, Xiaowen Wang, Jiaxin Cai, Xin Guo, Yujun He, and Hailun Yuan (2024). TPRoGI: A comprehensive rock glacier inventory for the Tibetan Plateau using deep learning. Earth System Science Data, 16(12), 5703–5721. https://doi.org/10.5194/essd-16-5703-2024.

2. **Zhangyu Sun**, Lin Liu, Chengyan Fan, Yan Hu, Francesca Baldacchino, Atanu Bhattacharya, Ella Wood, and Tobias Bolch. Unveiling large-scale velocity characteristics of rock glaciers in the Tibet-Pamir-Karakoram region using a streamlined InSAR framework. Manuscript submitted to International Journal of Applied Earth Observation and Geoinformation and under review.

3. **Zhangyu Sun**, Bao Zhang, and Yibin Yao (2021). Improving the Estimation of Weighted Mean Temperature in China Using Machine Learning Methods. Remote Sensing, 13(5), 1016. https://doi.org/10.3390/rs13051016.

4. **Zhangyu Sun**, Bao Zhang, and Yibin Yao (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. https://doi.org/10.1029/2019EA000701.

5. **Zhangyu Sun**, Bao Zhang, and Yibin Yao (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. https://doi.org/10.3390/rs11161893.

SELECTED CONFERENCES

1. **Zhangyu Sun**, Lin Liu, Yan Hu, and Chengyan Fan (2024). Assessing rock glacier velocities on the Tibetan Plateau using satellite SAR interferometry, EGU General Assembly Conference, Vienna, Austria.
2. **Zhangyu Sun**, Yan Hu, Lin Liu, Adina Racoviteanu, and Stephan Harrison (2023). Mapping and inventorying rock glaciers on the Tibetan Plateau from Planet Basemaps using deep learning, EGU General Assembly Conference, Vienna, Austria.
3. **Zhangyu Sun**, Yan Hu, Lin Liu, Adina Racoviteanu, and Stephan Harrison (2022). Mapping Rock Glaciers on the Tibetan Plateau from Planet Basemaps Using Deep Learning, AGU Fall Meeting, Chicago, U.S.

SELECTED HONORS AND AWARDS

Ernst Mach Grant, weltweit *2023*

Hong Kong PhD Fellowship *2021*

National Graduate Scholarship of China *2019*

Lei Jun 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*