Li Luohong

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Gender:	Male
Date of Birth:	03 July 1996
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Education background

2019.09 –present (Ph.D. student)	Major in Surveying and Mapping Science and Technology (Postgraduate and doctoral programs) Innovation Academy for Precision Measurement Science and Technology (formerly known as the Institute of Geodesy and Geophysics), Chinese Academy of Sciences, China. University of Chinese Academy of Sciences (UCAS) Supervisor: Prof. Yunbin Yuan
2023.09 –present (Visiting Ph.D. Student)	Space Geodesy Group, Institute of Geodesy and Photogrammetry, ETH Zurich. Supervisor: Prof. Benedikt Soja
2015.09 – 2019.06 (Bachelor of Science)	Major in Surveying and Mapping Engineering School of Traffic & Transportation Engineering, Changsha University of Science and Technology (CSUST), China.

Research Interests

Multi-GNSS precise point positioning and its integer ambiguity resolution (PPP-AR) algorithms for low-cost GNSS devices

The implementation and application of the Phase-only model on low-cost GNSS receivers

The quality control and deviation analysis of low-cost GNSS observables

Publications

1. **Li, L.**, Zhang, X., and Yuan, Y. (2022). Variation of receiver code biases under the influence of the receiver type and antenna configuration in the IGS network. Measurement Science and Technology, 33(9), 095103. DOI: 10.1088/1361-6501/ac7435. (SCI Q1)

2. **Li, L.**, Yuan, Y., and Zhang, P. (2023). On low-cost GNSS observables under different grades of antennas: Receiver-related biases and RTK results. Measurement, 214, 112771. DOI: 10.1016/j.measurement.2023.112771. (SCI Q1)

3. **Li, L.**, Zhang, H., Yuan, Y., Aichinger-Rosenberger, M., & Soja, B. (2024). On the real-time tropospheric delay estimates using low-cost GNSS receivers and antennas. GPS Solutions, 28(3), 1-13. DOI: 10.1007/s10291-024-01655-1. (SCI Q1)

4. Zhou, F., **Li, L.**, Wang, Y., Dai, Z., Ding, C., Li, H., & Yuan, Y. (2024). Analysis of different height correction models for tropospheric delay grid products over the Yunnan mountains. Atmosphere. (Under Review, SCI Q2)

5. **Li, L.**, Zhang, H., Yuan, Y., Aichinger-Rosenberger, M., & Soja, B. (2024). HDTM: A novel model providing hydrostatic delay and weighted mean temperature for real-time GNSS precipitable water vapor retrieval. (To be submitted)

6. Zhang. H. and **Li. L**. (2024). Machine learning-aided tropospheric delay modeling over China. (Book Chapter)

7. Zhang. H., Yuan. Y, **Li L**. (2024) Real-time oceanic precipitable water vapor sensing using BeiDou-3 satellite-based PPP-B2b service and low-cost GNSS devices. (To be submitted)

Conference

1. **Li, L.**, Zhang, H., Yuan. Y., Aichinger-Rosenberger, M. & Soja, B. (2024). Performance of Real-time Tropospheric Delay Using Low-cost GNSS Receivers and Antennas with PCV Correction. IGS Workshop. University of Bern, Bern, Switzerland. (**Poster**)

2. **Li, L.**, Zhang, H., Yuan. Y., Aichinger-Rosenberger, M. & Soja, B. (2024). A Novel Forecasting Zenith Hydrostatic Delay / Weighted Mean Temperature Model for Rapid PWV Retrieval and Its Application in Extreme Rainfall Events. IGS Workshop.

University of Bern, Bern, Switzerland. (**Poster**)

3. **Li, L.**, Zhang, H., Aichinger-Rosenberger, M. & Soja, B. (2024). The performance of forecasted grid products (TUW-FC/GFZ-FC/APM-FC) over mountains area considering seven different vertical reduction models. 9th International Colloquium on Scientific and Fundamental Aspects of GNSS. Wrocław University of Environmental and Life Sciences (UPWr), Wrocław, Poland. (**Oral**)

Awards

May 2023	Outstanding young talent APM, CAS, China
November 2019	Merit student for Postgraduate, UCAS, China.
December 2018	Outstanding graduates of Hunan Province, The Education Department of Hunan Province, Hunan Province, China
November 2017	National Scholarship, Ministry of Education, China.

Technical background

Languages: Chinese (native), English (fluent);

Programming languages: C/C++, Matlab and Python; also familiar with Linux and Windows environments;

Software skills: Proficient in using RTKLIB; familiar with BNC / Ginan;

Hardware experience: Ublox GNSS receivers and Comnav K803 receivers;

GNSS background: Familiar with GNSS theory, algorithm, and application as well as survey adjustment theory.