Xiao Xiao

PhD Candicate in Geophysics

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Education

2017 – present	PhD Candicate in Geophysics University of Science and Technology of China, Hefei, China
2013 – 2017	B.S. in Geophysics WuHan University, Wuhan, China

Research Interests

- Ambient Noise Source Analysis
- · Seismic Tomography
- Seismic Interferometry

Professional Societies & Activities

Spring, 2019	Student Organizer of "Weekly Graduate Student Seminar of Geophysics, USTC"
2017	Assist in coordinating exchange meeting of China Seismological Reference Model
2017 – present	Member of the American Geophysical Union (AGU)
2017 – present	Research assistant and database manager for China Seismological Reference Model
2016 – present	Contributor of GMT China Community

Awards & Honors

2017	Outstanding undergradute graduates of WuHan University
2017	Outstanding undergradute thesis of WuHan University

Peer-reviewed Publications

- 3. Cheng, S. H., **Xiao, X.**, Wu, J. P., Wang, W. L., Sun, L., Wang, X. X. & Wen, L. X.(2021). Crustal Thickness and Vp/Vs Variations Beneath the Continental China Revealed by Receiver Function Analysis. *Geophysical Journal International*, 228(3), 1731-1749. doi:10.1093/gji/ggab022
- Xiao, X., Cheng, S. H., Wu, J. P., Wang, W. L., Sun, L., Wang, X. X. & Wen, L. X.(2021). Shallow seismic structure beneath China revealed by P wave polarization, Rayleigh wave ellipticity and receiver function. *Geophysical Journal International*, 225(2), 998-1019. doi:10.1093/gji/ggab433

1. Chen, Z. Luo, J., **Xiao, X.**, & Sun, F.(2017). Assessment of COSMIC radio occultation water vapor profile. *Journal of National University of Defense Technology*, *39*(3), 201–206.

Papers Submitted/Under Review

- 3. Yao, J. Y., Wu, S. C., Li, T. J., Bai, Y. M., Xiao, X., Hubbard, J., Wang, Y., He, Y. M., Thant, M., & Tong, P. (2022). Imaging the upper 10 km crustal shear-wave velocity structure of central Myanmar via a joint inversion of body-wave polarizations and receiver functions. *Seismological Research Letter* [*Under Review*]
- 2. **Xiao, X.**, Sun, L., Wang, X. X. & Wen, L. X.(2022). Simultaneous inversion for surface wave phase velocity and earthquake centroid parameters: methodology and application. *Journal of Geophysical Research: Solid Earth [Under Review]*
- 1. Mao, S., Cheng, S. H., **Xiao, X.**, Wu, J. P., Wang, W. L., Sun, L., Wang, X. X., & Wen, L. X.(2022). A three-dimensional adaptive receiver function migration method: (II) application to southeastern Tibetan plateau. *Journal of Geophysical Research: Solid Earth [Submitted]*

Papers in Preparation

1. **Xiao, X.**, Cheng, S. H., Wu, J. P., Wang, W. L., Sun, L., Wang, X. X. & Wen, L. X.(2023). Seismic structure of the crust and uppermost mantle beneath China from various seismic constraints.

Meeting Abstracts

- Xu Y., Sun L., Hao J., Lu Z., Xiao, X.& Wen, L. (2019). Source properties of 17 June 2019 Changning earthquake (Mw 6.2), China and its aftershocks. Abstract S11G-0437 presented at 2019 AGU Fall Meeting, San Francisco, CA, USA.
- Zhu J., Lu Z., Xu Y., Xiao, X., Wang X. & Wen, L. (2019). Temperature-related Martian seismic events observed by InSight. Abstract DI51B-0025 presented at 2019 AGU Fall Meeting, San Francisco, CA, USA.
- 5. Mao S., Cheng S., **Xiao**, **X.**, Wu J. & Wen, L. (2019). A three-dimensional receiver function migration method imaging the crustal structure in Sichuan-Yunnan Region, Southwest China. Abstract S21D-0534 presented at 2019 AGU Fall Meeting, San Francisco, CA, USA.
- 4. Lu Z., **Xiao**, **X.**, Cheng S., Wang X., Zhu J. & Wen, L. (2019). Shallow Martian Seismic Velocity Structure Inferred from InSight's Seismic Signals Produced by Air Pressure Variations. Abstract DI51A-0015 presented at 2019 AGU Fall Meeting, San Francisco, CA, USA.
- 3. **Xiao, X.**, Cheng S.& Wen, L. (2019). A Preliminary Crustal Shear Wave Velocity Model for the continental China. Abstract S11D-0376 presented at 2019 AGU Fall Meeting, San Francisco, CA, USA.
- Xiao, X., Cheng S.& Wen, L. (2018). Shallow seismic structure beneath China revealed by bodywave polarization and Rayleigh-wave ellipticity. Abstract S23C-0530 presented at 2018 AGU Fall Meeting, Washington, DC, USA.
- 1. **Xiao, X.**, & Wen, L. (2017). 3D Crust and Uppermost Mantle Structure beneath Tian Shan Region from ambient noise and earthquake surface waves. Abstract S51D-062 presented at 2017 AGU Fall Meeting, New Orleans, LA, USA.

Talks

1. **Xiao, X.** Shallow shear wave structure beneath China revealed by rayleigh wave ellipticity and receiver function. *School of Earth and Space Sciences, University of Science and Technology of China*, Hefei, China. Dec. 25, 2018. **[Student Seminar]**

Expertise & Skills

Languages Mandarin Chinese, English.

ProgrammingC, Python, Fortran, Matlab, Shell, LaTeX.Seismological ToolsSAC, GMT, SOD, ObsPy, TauP, CPS330.

Synthetics Reflectivity Method, Modal summation, Generalized Ray Theory.