Xiao Xiao

PhD Candicate in Geophysics

Laboratory of Seismology and Physics of Earth's Interior; School of Earth and Space Sciences, University of Science and Technology of China Room 1127, Research Building, No. 96, Jinzhai Road, Hefei, Anhui 230026, China Email: xiaox17@mail.ustc.edu.cn | Website: http://home.ustc.edu.cn/~xiaox17

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

- 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.
- 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

1. 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 *GJI* [*Under Review*]

Papers in Preparation

- 2. **Xiao, X.**, Sun, L., Wang, X. X. & Wen, L. X.(2021). A new method to simultaneous inversion for the regional Rayleigh wave phase velocity structure and earthquake centroid location and time
- 1. **Xiao, X.**, Cheng, S. H., Wu, J. P., Wang, W. L., Sun, L., Wang, X. X. & Wen, L. X.(2021). 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 Tools**SAC, GMT, SOD, ObsPy, TauP, CPS330.

Synthetics Reflectivity Method, Modal summation, Generalized Ray Theory.