Linxuan Li

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Education

Graduate Student in Geophysics, California Institute of Technology, CA, USA 2023 -

B.S. in Geophysics, Wuhan University, Wuhan, China, GPA: 4.0/4.0 2019 - 2023
Advisor: Prof. Gang Luo
Thesis: The spatiotemporal variations in seismicity in the Three Gorges Reservoir area.

Research Interests Everything associated with Tectonics!

- **Surface/Subsurface Geodynamic Processes**: Crustal Stress & Strain, Spatiotemporal Patterns of Surface Deformation & Earthquakes; Induced Earthquakes
- **Active Fault Zone**: Fault-zone Complexity; Rupture Process; Earthquake Triggering; Slow Earthquakes; Earthquake Recurrence
- **Rock and Fluid Physics**: Fracture Mechanics; Thermo–Hydro–Mechanical–Chemical–Frictional Coupling (Earthquake Simulation); Multiphase Flow in Porous Media

Research Experience

Undergraduate Research Assistant, Wuhan University 2019 - 2023

With Profs. Gang Luo, Jiangtao Li, Mian Liu, and Xiaodong Song, I mainly focused on the following two fields: 1) The response of Earth's crust to stress disturbance (crustal deformation, seismicity, and seismic velocity); and 2) the magnitude–frequency distributions of earthquake sequences (from both technical and scientific perspectives).

Publications

3. **Linxuan Li** and Gang Luo (in revision). Can we obtain reliable seismic b-values for real-time catalogs?.
2. **Linxuan Li**, Gang Luo, and Mian Liu (2023). The K–M slope: a potential supplement for b-value. *Seismological Research Letters* 94, 1892-1899. doi.org/10.1785/0220220268. [PDF]
1. **Linxuan Li** and Gang Luo (2022). What causes the spatiotemporal patterns of seismicity in the Three Gorges Reservoir area, central China?. *Earth and Planetary Science Letters* 592, 117618. doi.org/10.1016/j.epsl.2022.117618. [PDF]

PRESENTATIONS

4. **Linxuan Li**, Jiangtao Li, Xiaodong Song, and Victor C. Tsai (2023/4, Oral, in Chinese). Explore the depth origin of temporal changes in Rayleigh-wave phase velocity. Congress of China Geodesy and Geophysics, Wuhan, China.
3. **Linxuan Li**, Gang Luo, and Mian Liu (2023/4, Oral, in Chinese). A new parameter for evaluating magnitude–frequency distribution in earthquake sequences: K–M Slope. Congress of China Geodesy and Geophysics, Wuhan, China.
2. **Linxuan Li**, Gang Luo, and Mian Liu (2022/12, Online Poster). Using K–M Slope to Evaluate Magnitude–Frequency Distribution in Earthquake Sequences. AGU Fall Meeting, Chicago, USA.
1. **Linxuan Li** and Gang Luo (2022/11, Oral, in Chinese). Seismicity related to water level changes in the Three Gorges Reservoir area. Annual Meeting of CGU, Online.

Honors and Awards

- **Yangtze River Student** 2023
  Sponsored by Hubei Provincial Department of Education
- **Luojia Role Model** 2023
  Sponsored by Wuhan University
- **Outstanding Student Paper Award** 2022
  Sponsored by Chinese Geoscience Union (CGU)
- **Leijun Scholarship** 2022
  Sponsored by Wuhan University
- **Yugang-Songxiao Scholarship** 2021
  Sponsored by Wuhan University
- **National Scholarship** 2020
  Sponsored by Ministry of Education of the People's Republic of China

Technical Skills

- **Languages**: Chinese, English
- **Programming Languages**: MATLAB, C/C++, Python, FORTRAN
- **Technical Softwares**: ABAQUS, GMT, ArcGIS, SPSS
- **Document/Presentation**: Office platform, Adobe, Overleaf