

Jinghan Yu

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Education

SUN YAT-SEN UNIVERSITY
BS in GEOPHYSICS

Sept 2021 – July 2025

Research Experience

Geodynamic modeling of the interaction between the mantle pillar and mid-ocean

*Zhuhai, Guangdong
Dec 2023 – Dec 2024*

*College Students' Innovation Entrepreneurial Training Program
Advisor: Jie Liao*

- Investigating the influence of the Hainan mantle plume during the spreading of the mid-ocean ridge in the South China Sea.
- Conducting numerical simulation experiments by applying advanced thermo-mechanical coupling numerical simulation methods in geodynamics.
- Searching for suitable parameters and modifying the program; writing a program to carry out numerical simulation experiments and obtain some parameter results.

Seismic detection of oceanic transition fault based on seismic array data

*Zhuhai, Guangdong
Dec 2023 – Dec 2024*

*College Students' Innovation Entrepreneurial Training Program
Advisor: Hongjian Fang*

- Using continuous data records distributed in Europe and the United States, based on recent developments in the seismic array method, to search for earthquakes occurring along the Mid-Atlantic Transition Fault.
- Collecting open seismic surface wave signals from Europe and the United States, locating the identified earthquakes using the BPMF program and other methods to obtain spatial information about the earthquakes, and writing a report.

Seismic noise signal characteristics in south china are studied based on seismic dense array

*Zhuhai, Guangdong
Dec 2022 – Dec 2023*

*College Students' Innovation Entrepreneurial Training Program
Advisor: Hongjian Fang*

- Analyzing the cross-correlation function of short-period seismic dense array data collected in Shantou, Guangdong Province, in 2022, systematically using a similarity-based ranking algorithm to obtain the time-space distribution of cross-correlation functions with different characteristics.
- Collecting data, programming to process and analyze seismic data, and writing the project achievement report, which was presented and communicated at the China Earth Science Federation in 2023.
- Title of the report: "Seismic Noise Signal Characteristics in South China Based on Seismic Dense Array."

Publications

Seismic Noise Signal Characteristics in South China Based on Seismic Dense Array

Oct 2023

Jinghan Yu, Chuye Ruan, Xiang Li

Awards

Research Achievement Bursary

*School of Earth Science
and Engineering, Sun
Yat-sen University
Oct 2023*

Diffendal Bursary

*School of Earth Science
and Engineering, Sun
Yat-sen University*

Technologies

Languages: Chinese, English

Proficient in geophysics related softwares: Microsoft Office, Python, Matlab, Geogiga Seismic Pro