HUIZHONG CHEN

EDUCATION

South China Sea Institute of Oceanology (SCSIO), CAS Guangzhou, China

2023 - Present

M.Sc. in Physical Oceanography, expected Jul. 2026 GPA: 3.88/4.0

Zhejiang University (ZJU) Hangzhou, China

2019 - 2023

B.S. in Marine Science GPA: 3.86/4.0 (87.95/100)

PUBLICATIONS AND MANUSCRIPTS

The Impact of Archipelagic Topography on Air–Sea Interaction and Typhoon Intensity in the South China Sea

Manuscript in preparation, expected submission in 2025

- Conducting high-resolution air—sea coupled model simulations to examine how the Xisha Islands influence tropical cyclone intensity in the South China Sea.
- Analyzing simulation results to quantify how island-induced air—sea feedbacks modify air-sea heat fluxes and tropical cyclone intensity.

RESEARCH EXPERIENCE

ZJU - Undergraduate Thesis

2023

Research on the Influencing Factors in Estimation and the Spatiotemporal Distribution of Global Air-Sea CO₂ Flux

- Compared 11 parameterization schemes for air-sea CO₂ exchange rates and evaluated their impacts on flux estimation accuracy.
- Mapped and analyzed the global spatiotemporal patterns of oceanic CO₂ sources and sinks using observational datasets.

ZJU - Student Research Training Project (SRTP)

2021 - 2022

Significant Wave Height Forecast Based on Artificial Neural Network

- Designed and implemented an LSTM-based neural network to forecast significant wave height (SWH) time series at some fixed observational stations.
- Achieved improved forecast accuracy compared to traditional statistical baselines, demonstrating the potential of deep learning for marine prediction tasks.

○ Honors and Awards

Academic Scholarship, University of Chinese Academy of Sciences	2023, 2024
Outstanding Graduate of Zhejiang University	2023
Zhengjiang University Scholarship, 3 rd Prize	2021, 2023
Zhengjiang University Scholarship, 1st Prize	2022
Outstanding Student, Zhejiang University	2022

℅ RESEARCH INTEREST

- Physical Oceanography; Ocean Modeling; Air-Sea Interaction
- High-Performance Computing (at a beginner/intermediate level)

i Miscellaneous

- Languages: English (IELTS: 7.0), Mandarin (Native speaker)
- Languages in programming: Python > MATLAB > FORTRAN > C/C++
- Proficient in atmosphere model WRF and ocean model POM
- Data analysis: Spectral Analysis;

Last update on 2025-09-25