Ruoxiao Gu

No. 388 Lumo Road, Wuhan, Hubei, China 430078

RUOXIAOGU@cug.edu.cn | 156 2383 5503

RESEARCH INTRESTS

Paleoclimatology, the evolution of global monsoon systems, the development of climate models

EDUCATION

MSc Atmospheric Science, China University of Geosciences, Wuhan 09/2022 – recent

- GPA: 3.5/4.0
- **Core Modules:** Numerical Climate Modelling; Advanced Synoptic Meteorology; Quaternary Environment and Global Change; The Climate System; Frontiers in Atmospheric Chemistry

BSc Atmospheric Science, China University of Geosciences, Wuhan 09/2018 – 06/2022

- GPA: 3.14/4.0
- **Core Modules:** Synoptic Meteorology; Climatology; Atmospheric Dynamics; Geofluid Mechanics; Global Change; Paleoclimatology; Numerical Weather Prediction; Statistical methods for meteorological

RESEARCH EXPERIENCES

Author, Impacts of vegetation cover on the change of the East Asian monsoon and westerlies during the late Pliocene warm period 09/2023 - recent

- Analyzed simulation data from NorESM-L and applied the Climate Feedback Response Analysis Method (CFRAM) to quantify climate feedbacks.
- Conducted quantitative assessments of vegetation, ice-sheet changes, and greenhouse gas impacts on East Asian monsoon during the late Pliocene warm period.
- Investigated changes in westerly circulation in the Northern and Southern Hemispheres, respectively, along with their regional and seasonal differences during the late Pliocene warm period.

Author, A study of tropical cyclones in the north-west Pacific Ocean on long-distance precipitation in Henan Province, 1961-2015 02/2022 - 2022/05

- Examined cyclone characteristics (path, intensity, frequency) using NCEP/NCAR reanalysis data.
- Applied k-means clustering to classify cyclone paths and analyzed associated circulation and precipitation patterns.

PUBLICATION

The crucial role of vegetation cover in shaping East Asian summer monsoon changes during the late Pliocene warm period (under review) 12/2024

- Journal: **Quaternary Science Reviews (JCR Q1, IF=3.2)**
- Status: **Online**
- Co-authors: ***Ruoxiao Gu (First author)***, Xiangyu Li (*Corresponding Author*), Bo Liu, Hua Li, Zhongshi Zhang (*Corresponding Author*), Yong Liu

HONERS AND AWARDS

- **1st- Graduate Study Scholarship** 2024, 2023, 2022

ADDITIONAL EXPERIENCES

Academic Conferences

- the 9th Youth Geoscience Forum 05/2024
- the 2023 Annual Academic Meeting of Hubei Meteorological Society 12/2023
- the 1st Chinese Paleoclimate Simulation Forum and Disciplinary Development Seminar 12/2023
- Nansen-Zhu International Research Centre 20th Academic Symposium 10/2023
- the 7th Climate Change Detection and Monitoring Colloquium 08/2023
- the 2022 INQUA LoessFest 08/2022

Academic Training

- the 9th Nansen-Zhu Summer School 10/2023
- the 2022 National Graduate Summer School of National University of Defense Technology 07/2022
- Field Exercises of Geology and Geomorphology in Beidaihe 08/2019

Internship Experience

- Xianning Meteorological Service 07/2020

Extracurricular Experience

- Conference services staff, the 1st Chinese Paleoclimate Simulation Forum and Disciplinary Development Seminar 12/2023
- Member, Student Union 09/2018 - 06/2022

Technologies

- **Coding and Visualization Skills:** NCL; Fortran; Python; R; Office (Excel, PPT)
- **Languages:** Mandarin Chinese (native); English (conversational)
- **Hobbies:** Hiking; Badminton; Photography; Volunteering with animal conservation associations