

Yuan Xie

yuanxie@cug.edu.cn

School of Geophysics and Geomatics, China University of Geosciences, Wuhan

EDUCATION

China University of Geosciences
PhD, Geophysics

Wuhan, China
expected graduate in Dec. 2024

China University of Geosciences
BS, Geophysics

Wuhan, China
2018

RESEARCH EXPERIENCES

ETH Zürich

Zürich, Switzerland

Advisor: Prof. Taras Gerya, Dr. Attila Balázs

2022-2024

Understanding the interplay between deep dynamics, magmatism and surface deformation in orogeny

China University of Geosciences

Wuhan, China

Advisor: Prof. Xiong Xiong

2022

Dynamic mechanism controlling the topography of Longmenshan area

China University of Geosciences

Wuhan, China

Advisor: Prof. Yadan Mao

2017

Southwestern Australia nearshore surface current revealed by high-frequency radar

PUBLICATIONS

Xie Y., Balázs A., Gerya T., Xiong X. Delamination in the Eastern Anatolian Plateau. In preparation.

Zhou W, Shan B, Xiong X, Guo R, **Xie Y**, Xiao Y, Xuan Y. Lithospheric Thermal and Compositional Structure of Northeast China: Implications for Lithospheric Thinning. Under review in JGR.

Xie Y., Balázs A., Gerya T., Xiong X. Uplift of the Tibetan Plateau driven by mantle delamination from overriding plate. *Nature Geoscience*, 2024: 17, 683–688.

Xie Y., Li Y-D, Xiong X. Dynamic mechanisms controlling the topography of Longmenshan area. *Science China Earth Sciences*, 2020: 63, 121-131.

SELECTED PRESENTATIONS

“Delamination of the lithosphere and its surface expressions”. Oral on Workshop on Tectonics and Geophysics in the east part of Tibetan Plateau, September 2024, Huanggang, China. Selected as the best student presentations.

“Overriding plate drives the uplift of the Tibetan Plateau”. Invited talk for seminar in Institute of Geophysics, China, Earthquake administration, May 2024, Beijing, China.

“Mantle delamination controls the formation of orogenic plateau and the migration of magmatism”. Talk for GFD Seminar, November 2023, ETH Zürich, Switzerland.

“Upper Plate Mantle Delamination Controls Orogenic Plateau Formation and the Migration of Magmatism”. Oral on Swiss-German Geodynamics Workshop, August 2023, Haltern am See, Germany.

“Lithospheric mantle delamination control on orogenic plateau formation”, Poster on EGU, April 2023, Vienna, Austria. Highlighted as Public Interests

“Dynamic mechanisms controlling the topography of Longmenshan Area”. Oral on CGU, October 2018, Beijing, China. Selected as the best student presentations

SKILLS

Computer: Matlab; Shell; Python.

Software: 2D thermo-mechanical modelling (Numerical code: I2VIS); GMT; LaTeX

TEACHING EXPERIENCES

China University of Geosciences

Wuhan, China

Teaching assistant, Geodynamics course

2019

ETH Zürich

Zürich, Switzerland

Teaching Fellow, Gravimetry field course

2022 & 2023