Final-year Ph.D. student   Email: wenyue.zou@unil.ch
ResearchGate and Google Scholar
Expertise of Centre for Climate Extremes (ECCE)
Faculty of Geosciences and Environment, University of Lausanne

📑 RESEARCH INTERESTS

- ➢ Storm and floods risk assessment
- ➢ Stochastic/ML and dynamic modelling of extreme rainfall
- ➢ Climate extreme impact in future

💼 PROFESSIONAL SKILLS

- ➢ Proficient in **predicting future changes in storm events and their impact on floods**
- ➢ Proficient in **extreme rainfall frequency analysis** and **storm stochastic modelling**
- ➢ Proficient in **geostatistical downscaling and interpolation**
- ➢ Proficient in MATLAB, Python and ArcGIS for mapping and data analysis
- ➢ Skillful in literature review and data management

📇 PUBLICATIONS

- ➢ **Zou, W et al**., 2025. A framework to project future process-based urban flood by morphing and transposing sub-daily storm fields. (draft)
- ➢ **Zou, W.,** Wright, B., Peleg, N. 2025. Morphing sub-daily rainfall fields based on temperature shifts to project future changes in rainfall extremes. Water Resources Research, under review.
- ➢ **Zou, W** et al., 2024. Multiple-point geostatistics-based spatial downscaling of heavy rainfall fields. Journal of Hydrology. https://doi.org/10.1016/j.jhydrol.2024.130899.
- ➢ **Zou, W** et al., 2021. Spatial interpolation of the extreme hourly precipitation at different return levels in the Haihe River basin. Journal of Hydrology 598, 126273. https://doi.org/10.1016/j.jhydrol.2021.126273.
- ➢ Li, Q., Zhou, J., **Zou, W**., et al., 2020. A tributary-comparison method to quantify the human influence on hydrological drought. Journal of Hydrology. https://doi.org/10.1016/j.jhydrol.2020.125652.

🎓 EDUCATION BACKGROUND

- **2021 - present**   **Ph.D. in Environmental Science,** Faculty of Geosciences and Environment, University of Lausanne

  *Thesis: **Future changes in rainfall properties and their effect on urban flooding***

- **2018 - 2021**   **M.sc in Physical Geography,** Faculty of Geographic Science, Beijing Normal University   GPA:3.75/4 (10%)

  *Thesis：**Spatiotemporal characteristics of rainfall events based on a highly dense rain-gauge network.***

- **2014 - 2018**   **B.sc in Geography,** Faculty of Geographic Science, Northwest Normal University   GPA:3.84/4 (1%)

  *Thesis：**Spatial and temporal variation characteristics of hourly precipitation during the Warm season 1961-2012 in the Haihe River basin.***

✒ SERVICES

- 2024   **Committee of Expertise Center for Climate Change, University of Lausanne**
- 2022   **Teaching assistant,** Faculty of Geosciences and Environment, University of Lausanne
  - Watershed and river network modelling
- 2020   **Teaching assistant,** Faculty of Geographical Science, Beijing Normal University
  - Meteorology and Climate Practice course
  - Assessment of climate change and its impacts
- 2023   Student committee of CliMACT between UNIL and EPFL university
- 2021   Student committee in Association du Corps Intermédiare, FESG, UNIL

🏆 AWARDS AND SCHOLARSHIPS

- 2021   Excellent Graduation Thesis in Beijing Normal University
- 2018, 2019   Academic Scholarship in Beijing Normal University (first class, twice)
- 2017   First prize in Scientific Research Challenge Cup at Northwest Normal University (5%)
- 2016   First prize in National College Students Mathematic Modeling Competition (10%)
- 2015   National Endeavor Scholarship (10%)