

QI OU

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EMPLOYMENT

- University of Edinburgh — Lecturer in Radar Remote Sensing** 02/01/2024 - Present
- University of Leeds — COMET Postdoctoral Research Fellow** 06/01/2022 - 01/31/2024
Advisors: John Elliott, Tim Wright
Topic: Strain Mapping with Satellite Geodesy over Tianshan
- University of Oxford — Independent Postdoctoral Researcher** 03/01/2022 - 03/31/2022
Topic: Machine Learning for Paleo-Earthquake Slip History
- University of Oxford — Postdoctoral Research Assistant** 04/01/2021 - 02/21/2022
Advisors: Tim Wright, Barry Parsons
Topic: Mapping Crustal Strain-rate and Velocity Fields in North-eastern Tibet

EDUCATION

- University of Oxford — PhD in Earth Sciences** 10/2016 - 04/2021
Supervisors: Richard Walker, Barry Parsons
Thesis: Crustal Strain and Seismic Hazard of the NE Tibetan Plateau
- University of Cambridge — MSc in Geological Sciences** 10/2015 - 06/2016
Supervisor: Nicky White
Thesis: Cenozoic Drainage Evolution and Vertical Motions of East Asia (1st Class)
- University of Cambridge — BA in Natural Sciences** 10/2012 - 06/2015
Supervisor: Alexander M Piotrowski
Thesis: Geology of Xingcheng, China, with a 1:10000 geological map (1st Class)
- Keywords:** InSAR, Tectonics, Earthquakes, Hazard, Permafrost, Drainage, Groundwater, Mining

PUBLICATIONS

- Tim Wright, Greg Houseman, Jin Fang, Yasser Maghsoudi, Andy Hooper, John Elliott, Lucy Evans, Milan Lazecky, **Qi Ou**, Barry Parsons, Chris Rollins, Lin Shen, Hua Wang. High-resolution geodetic strain rate field reveals dynamics of the India-Eurasia collision (*under revision for Science*)
- Qi Ou**, Galina Kulikova, Frank Krüger (2023), Earthquake source parameters determination using analogue seismic records. In Austin Elliott & Christopher Grützner (Eds.), *Understanding Past Earthquakes*. (*book chapter, in print*)
- Neill Marshall, **Qi Ou**, et al., (2023): Seismotectonic aspects of the Ms 7.3 1948 October 5th Agabab (Ashgabat) earthquake, Turkmenistan: right-lateral rupture across multiple fault segments, and continuing urban hazard, *Geophysical Journal International*, <https://doi.org/10.1093/gji/ggad488>
- Qi Ou**, Milan Lazecky, Scott Watson, Yasser Maghsoudi, Tim Wright (2023): 3D Displacements and Strain from the 2023 February Turkey Earthquakes, version 1. NERC EDS Centre for Environmental Data Analysis, 14 March 2023. <https://dx.doi.org/10.5285/df93e92a3adc46b9a5c4bd3a547cd242>
- Jing Liu, Jing Xu, **Qi Ou**, Longfei Han, Zijun Wang, Zhigang Shao, Peizhen Zhang, Wenqian Yao, Peng Wang (2023). Discussion on the magnitude overestimation of the 1920 Haiyuan earthquake. *Acta Seismologica Sinica*, 45(4): 1-18. <https://doi.org/10.1016/10.11939/jass.20220051>
- Qi Ou**, Simon Daout, Jonathan R. Weiss, Lin Shen, Milan Lazecky, Tim J. Wright, Barry Parsons (2022). Large-scale Interseismic Strain Mapping of the NE Tibetan Plateau from Sentinel-1 Interferometry. *Journal of Geophysical Research: Solid Earth*, 127, <https://doi.org/10.1029/2022JB024176>

- Highlighted in AGU's [Read the paper with the author](#) September 2022 series.

Jin Fang, **Qi Ou***, Tim J. Wright, Ryo Okuwaki, Ruth Amey, Tim Craig, John Elliott, Andy Hooper, Milan Lazecky, Yasser Maghsoudi (2022) Earthquake Cycle Deformation Associated with the 2021 Mw7.4 Maduo (Eastern Tibet) Earthquake: An Intrablock Event on a Slow-Slipping Fault from Sentinel-1 InSAR and Teleseismic Data. *Journal of Geophysical Research: Solid Earth*, 127, e2022JB024268 <https://doi.org/10.1029/2022JB024268>

Qi Ou, (2021). Crustal Strain and Seismic Hazard of the NE Tibetan Plateau. *Thesis for the degree of Doctor of Philosophy in Earth Sciences, University of Oxford*, shorturl.at/pqB02

Qi Ou, Galina Kulikova, Jingxing Yu, Austin Elliott, Barry Parsons, Richard Walker (2020). Magnitude of the 1920 Haiyuan Earthquake re-estimated using Seismological and Geomorphological Methods. *Journal of Geophysical Research: Solid Earth*. 125, <https://doi.org/10.1029/2019JB019244>

- Top 10% downloaded papers of JGR: Solid Earth in 2020. Received **914** downloads in six months, and **1722** downloads by 9 Aug 2021.

Siyu Wang, Zhikun Ren, Chuanyong Wu, Qiyun Lei, Wenyu Gong, **Qi Ou**, Huiping Zhang, Guangxue Ren, Chuanyou Li (2019). DEM generation from Worldview-2 stereo imagery and vertical accuracy assessment for its application in active tectonics. *Geomorphology*, (336), pp 107-118, <https://doi.org/10.1016/j.geomorph.2019.03.018>

Xiaobo Li, **Qi Ou**, Yini Wang, Han Wang, Ming Yang, Meisheng Zhang (2020). The Precambrian stratigraphic sequence and unconformities in Xingcheng area of Liaoning Province, China, with discussion of the sedimentary-Paleogeographic evolution of the Southeastern Yanshan Taphrogenic Trough Basin. *Acta Sedimentologica Sinica*, 4, 687711, <https://doi.org/10.14027/j.issn.1000-0550.2020.004>

CONFERENCE PRESENTATIONS

Qi Ou, John Elliott, Yasser Maghsoudi, Chris Rollins, Milan Lazecky, Tim Wright (2023), Tectonic, Climatic and Anthropogenic Deformation over the Tianshan mountains **Oral**, American Geophysical Union Fall Meeting.

Qi Ou, John Elliott, Yasser Maghsoudi, Chris Rollins, Milan Lazecky, Tim Wright (2023), Large-scale velocity mapping over the Tianshan mountains **Oral**, Fringe Meeting, Leeds, UK.

Qi Ou, Barry Parsons, Chris Rollins, Tim Wright, John Elliott (2022), From InSAR-derived Strain Rate Fields to Seismic Hazard over the Northeast Tibetan Plateau What does Past Seismicity Say? **Invited Oral**, American Geophysical Union Fall Meeting.

Qi Ou, Simon Daout, Barry Parsons, Tim Wright, Jonathan Weiss, Lin Shen, Milan Lazecky, Yassar Mehrani (2022), Large-scale strain mapping over the northeast Tibetan Plateau. **Invited Webinar**, COMET Webinar.

Qi Ou, Simon Daout, Barry Parsons, Tim Wright, Jonathan Weiss, Lin Shen, Milan Lazecky, Yassar Mehrani (2021), Say Bye to Blobbiness: Getting the Sharpest Strain Rate Map out of InSAR Velocities A Case Study of the NE Tibetan Plateau. **Oral**, American Geophysical Union Fall Meeting.

- **18th most-watched** out of over 1500 talks at the 2021 AGU Fall Meeting.

Qi Ou, Galina Kulikova, Jingxing Yu, Barry Parsons, Richard Walker (2018), Magnitude of the 1920 Haiyuan Earthquake re-estimated using Geological and Seismological Methods. **Poster**, the 9th International INQUA meeting on Palaeoseismology, Active Tectonics and Archaeoseismology, Greece. (*Best Poster Award*)

CONFERENCE CONVENING

American Geophysical Union, Fall Meeting

2023

Ou, Guns, Weiss, Zeng, Strain Rate Mapping and Earthquake Hazard.

Seismological Society of America, Annual Meeting **2022**

Bent, Hellweg, Hwang, Lewis, **Ou**, Everything Old is New Again Resurging Use of Analog Data.

Seismological Society of America, Annual Meeting **2021**

Euler, Young, Moya, Lee, **Ou**, Lewis, Dewey, Back to the Future: Innovative New Research with Legacy Seismic Data.

TEACHING EXPERIENCES

Lecturer, University of Edinburgh *02/2024 - present*

Leading lectures and practicals for the Active Remote Sensing course of the MSc in Earth Observation and Geoinformation Management. Supervising 2 MSc dissertation projects on the application of InSAR.

Associate Fellow, UK Higher Education Academy *01/2022*

Met Descriptor 1 of the UK Professional Standards Framework.