Zhipeng Pei

State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing,
Wuhan University, Wuhan 430079, China
Webpage: zhipengpei.top
zhipeng.pei@whu.edu.cn

Education

Universitat Politècnica de València	Guest Scientist	Since 2024.08	Valencia, Spain
Wuhan University	Ph.D. Candidate	Since 2019.09	Wuhan, China
Wuhan University	B.Eng.	2015.09 - 2019.06	Wuhan, China

Publications

[1] **Z. Pei**, G. Han, X. Ma, H. Su, and W. Gong. Response of major air pollutants to covid-19 lockdowns in china. *Science of the Total Environment*, 743:140879, 2020.

[2] **Z. Pei**, G. Han, X. Ma, T. Shi, and W. Gong. A method for estimating the background column concentration of co 2 using the lagrangian approach. *IEEE Transactions on Geoscience and Remote Sensing*, 60:1–12, 2022.

[3] **Z. Pei**, G. Han, H. Mao, C. Chen, T. Shi, K. Yang, X. Ma, and W. Gong. Improving quantification of methane point source emissions from imaging spectroscopy. *Remote Sensing of Environment*, 295:113652, 2023.

[4] **Z. Pei**, G. Han, T. Shi, X. Ma, and W. Gong. A xco2 retrieval algorithm coupled spatial correlation for the aerosol and carbon detection lidar. *Atmospheric Environment*:119933, 2023.

[5] G. Han, **Z. Pei***, T. Shi, H. Mao, S. Li, F. Mao, X. Ma, X. Zhang, et al. Unveiling unprecedented methane hotspots in china's leading coal production hub: a satellite mapping revelation. *Geophysical Research Letters*, 51(10):e2024GL109065, 2024.

PRESENTATIONS

[1] **Z. Pei** et al., Assessment of Anthropogenic CO2 Emissions Using OCO-2 Observations: A case study in Anshan. China's 1st Carbon Neutral and Green Development Conference, Shenzhen, China, May 2021, Oral.

[2] **Z. Pei** et al., Retrieval of greenhouse gas concentrations using ground-based FTS spectra at Wuhan, China. Optical Sensors and Sensing Congress, Virtual, Jul. 2021, Oral.

[3] **Z. Pei** et al., Detection of methane point sources with hyperspectral satellites in China. Sino-American Youth Dialogue, Beijing, China, Oct. 2021, Oral.

[4] **Z. Pei** et al., Towards Better Estimating Facility-level Methane Emissions with Spaceborne Imaging Spectrometers. AGU Fall Meeting 2023, San Francisco, U.S., Dec.. 2023, Poster.

TECHNICAL SKILLS

- **Programming languages:** Proficient with MATAB, Python, R, Google Earth Engine.
- **Modeling experience:** WRF-LES, WRF-STILT and LBLRTM.

SCHOLARSHIPS/HONORS

- National Scholarship for Graduate Student (2021, 2024)
- Excellent graduate of Wuhan University(2019)
- Scholarship of Wuhan University (2017, 2018, 2020, 2021, 2024)

- Outstanding Student Leader of Wuhan University (2017, 2018)
- Excellent student of Wuhan University(2017)

LANGUAGE

- Native-level proficiency in Chinese, Good at reading and writing in English.

PERSONAL INTERESTS

- Badminton, swiming, hiking and photography.