Jing Wei, Ph.D. (Updated to 3/2023)

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Biography

I am specialized in air quality, aerosols, particulate matter (PM), trace gases, and clouds by means of remote sensing, big data, and artificial intelligence (AI). Up to now, I have authored over **60** SCI papers as first or corresponding authors in leading journals such as *RSE*, *ES&T*, *JGR*, *ACP*, and *TGRS*, including **6 ESI Hot (Top < 0.1%) papers** and **12 ESI Highly Cited (Top < 1%) papers** indicated by the *Web of Science*, and **7** papers have been cited more than 100 times, with the highest one of **300+** times. My total citations are **4200+** times with an H-index of **34** (Google). I was the recipient of the **AGU James R. Holton Award** and on the Stanford University List of the **World's Top 2% Scientists (2021, 2020)**. I have served as an Editor of *Earth System Science Data*, and Associate Editor of *Journal of Geophysical Research: Atmospheres*, and *Remote Sensing*. I have generated the long-term, high-resolution and high-quality datasets of ambient air pollutants in China (CHAP), the United States (USHAP), and the Global World (GHAP), which have been widely used, leading to more than **150** applied publications.

Work Experience

Faculty Research Associate, Department of Atmospheric and Oceanic Science, Earth System Science Interdisciplinary Center, University of Maryland, College Park, USA, 2022–Present.
Postdoctoral Research Scholar, Department of Chemical and Biochemical Engineering, University of Iowa, USA, 2021–2022.
Research Assistant, Center for Earth System Science, Tsinghua University, China, 2017–2018.
Research Assistant, Institute of Space and Earth Information Science, Chinese University of Hong Kong, China, 2017.

Education

Joint Ph.D. in Atmospheric Physics and Atmospheric Environment, University of Maryland, College Park, USA, 2021.
Ph.D. in Global Environmental Change, Beijing Normal University, China, 2021.
M.Sc. in Photogrammetry and Remote Sensing, Shandong University of Science and Technology, China, 2017.
B.Sc. in Remote Sensing Science and Technology, Shandong University of Science and Technology, China, 2014.

Research Interests

- Remote sensing of aerosols and particulate matter
- Remote sensing of trace gases
- Air pollutant modelling and health exposure
- Impacts of air pollution on public health, environment, and economy
- Cloud and cloud shadow detection
- Artificial intelligence (machine learning, deep learning, and transfer learning)
- Big data

Publications and Citations

- Total SCI journal publications: **171** (first/corresponding author: **67**)
- Google Scholar: ***H-index*** = 34, ***Total Citations*** = 4,264
- Scopus: ***H-index*** = 33, ***Total Citations*** = 4,025
- Web of Science: ***H-index*** = 30, ***Total Citations*** = 3,409
- A full publication list is provided on Page 4–13.

Awards and Honors

- 2022: James R. Holton Award, American Geophysical Union (AGU)
- 2022: World's Top 2% Scientists (2021), Stanford University Analysis & Mendeley

- 2022: Top 100 Most Cited Chinese Papers Published in International Journals (2021), Institute of Scientific and Technology Information of China
- 2022: Best Paper Award, Earth System Science Interdisciplinary Center, University of Maryland
- 2021: World's Top 2% Scientists (2020), Stanford University Analysis & Mendeley
- 2021: Zhou Tingru Geography Youth Award, Zhou Tingru Scholarship Secretariat
- 2020: Gao Tingyao Environmental Protection Outstanding Youth Award, Gaotingyao Environmental Protection Technology Development Foundation
- 2019: Li Xiaowen Remote Sensing Science Youth Award, Li Xiaowen Foundation Council
- 2021: Outstanding Graduates (Ph.D.), Beijing
- 2021: Special Prize for Graduate Academic Innovation, Beijing Normal University
- 2020/2019: National Scholarship (Ph.D.), Beijing Normal University
- 2018: Special Scholarship for Doctoral Freshmen, Beijing Normal University
- 2017: Outstanding Graduates (M.Sc.), Shandong Province
- 2016: Outstanding Scientific & Technological Innovation Achievement Award (Second Prize), Shandong Province
- 2016/2015: National Scholarship (M.Sc.)
- 2014: Outstanding Graduates (B.Sc.), Shandong Province

Authorship Recognitions

- 2022/2021/2019: ESI Hot Paper, *Remote Sensing of Environment*
- 2020: ESI Hot Paper, *Atmospheric Chemistry and Physics*
- 2019: ESI Hot Paper, *Environmental Science & Technology*
- 2019: ESI Hot Paper, *Atmospheric Environment*
- 2022/2021/2019: ESI Highly Cited Paper, *Remote Sensing of Environment*
- 2022: ESI Highly Cited Paper, *Environmental Science & Technology*
- 2022: ESI Highly Cited Paper, *Journal of Cleaner Production*
- 2021/2020/2019: ESI Highly Cited Paper, *Atmospheric Chemistry and Physics*
- 2021: ESI Highly Cited Paper, *Environment International*
- 2021: ESI Highly Cited Paper, *Science of the Total Environment*
- 2019: ESI Highly Cited Paper, *Environmental Science & Technology*
- 2019: ESI Highly Cited Paper, *Atmospheric Environment*
- 2018: ESI Highly Cited Paper, *Atmospheric Environment*
- 2018: ESI Highly Cited Paper, *Remote Sensing*
- 2021: Most Cited Articles (since 2020), *Remote Sensing of Environment*
- 2021/2019: Most Cited Articles (since 2019), *Remote Sensing of Environment*
- 2019: Most Cited Articles (since 2018), *Remote Sensing of Environment*
- 2019: Most Cited Articles (since 2018), *Atmospheric Environment*
- 2021: 1st Most Cited Paper, *Remote Sensing of Environment*
- 2019: 1st Most Cited Paper and Author, *Atmospheric Environment*
- 2021: Journal High Impact Paper, *Hypertension*
- 2020: Journal Highlight Article, *Atmospheric Chemistry and Physics*
- 2018: Journal Highlight Article, *Journal of Geophysical Research Atmospheres*

Research Grants

- Co-Investigator: NASA Earth Sciences' Applied Science Program [80NSSC21K1980], 2021–Present
- Co-Investigator: NASA Earth Sciences' Applied Science Program [80NSSC21K0428], 2021–Present
- PI: Interdisciplinary Research Fund for the First-Year Doctoral Candidates [BNUXKJC1808], Beijing Normal University, 2018–2019
- PI: Graduate Innovation Fund [SDKDYC170103], Shandong University of Science and Technology, 2016–2017
- PI: Graduate Innovation Fund [YC150103], Shandong University of Science and Technology, 2015–2016
- PI: Graduate Innovation Fund [YC140307], Shandong University of Science and Technology, 2014–2015
- Participant: National Key R&D Program of China [2017YFC1501702]
- Participant: National Natural Science Foundation of China [42030606, 91544217, 41171270]

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Editorial and Reviewer Services

- Editor, *Earth System Science Data* (IF = 11.815), 2022–Present
- Associate Editor, *Journal of Geophysical Research: Atmospheres* (IF = 5.22), 2023–Present
- Associate Editor, *Remote Sensing* (IF = 5.349), 2022–Present
- Editorial Board Members: *International Journal of Digital Earth* (2022–Present), *Frontiers in Earth Science* (2022–Present), and *Big Earth Data* (2021–Present)
- Youth Editorial Board Members: *The Innovation* (2022–Present), *Remote Sensing Technology and Application* (*Chinese*, 2022–Present), *Journal of Atmospheric and Environmental Optics* (*Chinese*, 2022–Present), *Journal of Environmental Hygiene* (*Chinese*, 2022–Present)
- Guest Editors: *Atmospheric Measurement Techniques* (2021–Present), *Sustainability* (2021–Present), *Frontiers in Earth Science* (2021–2022), *Frontiers in Environmental Science* (2021–2022), *Atmosphere* (2022), *National Remote Sensing Bulletin (Chinese)* (2021–2022), *Frontiers in Public Health* (2022)
- Journal Reviewer (150+ peer reviews for 50+ journals): *Remote Sensing of Environment*, *Environmental Science & Technology*, *Journal of Geophysical Research-Atmospheres*, *Geophysical Research Letters*, *Atmospheric Chemistry and Physics*, *IEEE Transactions on Geoscience and Remote Sensing*, *The Lancet Regional Health – Americas*, et al.

Membership and Service

- Executive Secretary, Chinese-American Oceanic and Atmospheric Association (COAA), 2023-Present
- Co-Chair, Atmospheric Environmental Remote Sensing Society (AERSS) ECPC, 2022-Now
- Co-Convener/Co-Chair, Asia Oceania Geosciences Society (AOGS) Section, 2022 **(Top Conveners)**
- Members: American Geophysical Union (AGU), American Meteorological Society (AMS), Asia Oceania Geosciences Society (AOGS), Chinese-American Oceanic and Atmospheric Association (COAA)

Selected Invited Seminars

Total seminars: **22** talks (**1** Chair and **1** Invited Department Seminar).

- **Wei, J.** University of Maryland, College Park, November 3, 2022. (Invited **Department Seminar**)
- **Wei, J.** University of Science and Technology of China, October 21, 2022.
- **Wei, J.** MDPI Remote Sensing, June 25, 2022. **(Chair)**
- **Wei, J.** China Clean Air Policy Partnership, Tsinghua University, April 6, 2021.
- **Wei, J.** Lanzhou University, China, March 26, 2021.
- **Wei, J.** Nanjing University of Information Science and Technology, December 29, 2020.
- **Wei, J.** NASA Goddard Space Flight Center, December 1, 2020.
- **Wei, J.** Ministry of Ecology and Environment Center for Satellite Application on Ecology and Environment, November 25, 2020.
- **Wei, J.** Zhejiang University, September 20, 2020.
- **Wei, J.** Peking University, July 8, 2019.

Selected Presentations

Conference Presentations: **14** talks (**2** invited), **7** posters.

- **Wei, J.** ChinaHighAirPollutants (CHAP) dataset driven by multi-source satellite remote sensing, Land Remote Sensing Products Frontier Dynamics and Data Use Learning Conference, February 19, 2023. **(Invited Talk)**
- **Wei, J.** Two-decade fine-scale surface $PM_{2.5}$ estimates and spatiotemporal variations in China using machine learning, American Meteorological Society (AMS) Annual Meeting, January 10, 2023.
- **Wei, J.** Tracking ambient air pollution from space integrating Big Data and artificial intelligence. American Geophysical Union (AGU) Fall Meeting, December 12–16, 2022, Chicago, IL, USA. **(Invited Talk)**
- **Wei, J.** Satellite-derived daily fine-scale surface NO_2 concentrations in China by combing machine and deep learning models. American Geophysical Union (AGU) Fall Meeting, December 12–16, 2022, Chicago, IL, USA.
- **Wei, J.** Full-coverage daily ground-level ozone (O_3) estimation from Bigdata using machine learning across China. Asia Oceania Geosciences Society (AOGS), August 1–5, 2022.
- **Wei, J.** Ground-level NO_2 surveillance derived from the Sentinel-5P TROPOMI satellite across China using remote sensing and machine learning. Asia Oceania Geosciences Society (AOGS), August 1–6, 2021, Online.

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First/corresponding-authors' publications (67) [Citations > 100]

(Full list at: https://weijing-rs.github.io/publication.html)

(*: Corresponding author; #: Co-first author)

1. **Wei, J.**, Huang, W., Li, Z., Xue, W., Peng, Y., Sun, L., and Cribb, M. Estimating 1-km-resolution $PM_{2.5}$ concentrations across China using the space-time random forest approach. *Remote Sensing of Environment*, 2019, 231, 111221. **(ESI Hot and Highly Cited Paper, Journal Most Cited Articles since 2018 and 2019) [304]**
2. **Wei, J.**, Li, Z., Lyapustin, A., Sun, L., Peng, Y., Xue, W., Su, T., and Cribb, M. Reconstructing 1-km-resolution high-quality $PM_{2.5}$ data records from 2000 to 2018 in China: spatiotemporal variations and policy implications. *Remote Sensing of Environment*, 2021, 252, 112136. **(ESI Hot and Highly Cited Paper, Journal Most Cited Articles since 2019 and 2020, Top 100 Most Cited Chinese Papers Published in International Journals in 2021, ESSIC 2022 Best Paper Award) [271]**
3. **Wei, J.**, Li, Z., Cribb, M., Huang, W., Xue, W., Sun, L., Guo, J., Peng, Y., Li, J., Lyapustin, A., Liu, L., Wu, H., and Song, Y. Improved 1 km resolution $PM_{2.5}$ estimates across China using enhanced space-time extremely randomized trees. *Atmospheric Chemistry and Physics*, 2020, 20(6), 3273–3289. **(ESI Hot and Highly Cited Paper) [232]**
4. **Wei, J.**, Li, Z., Peng, Y., and Sun, L. MODIS Collection 6.1 aerosol optical depth products over land and ocean: validation and comparison. *Atmospheric Environment*, 2019, 201, 428–440. **(ESI Hot and Highly Cited Paper, Journal Most Cited Articles since 2018) [204]**
5. **Wei, J.**, Li, Z., Guo, J., Sun, L., Huang, W., Xue, W., Fan, T., and Cribb, M. Satellite-derived 1-km-resolution PM_1 concentrations from 2014 to 2018 across China. *Environmental Science & Technology*, 2019, 53(22), 13265–13274. **(ESI Hot and Highly Cited Paper) [152]**
6. **Wei, J.***, Li, Z., Li, K., Dickerson, R., Pinker, R., Wang, J., Liu, X., Sun, L., Xue, W., and Cribb, M. Full-coverage mapping and spatiotemporal variations of ground-level ozone (O_3) pollution from 2013 to 2020 across China. *Remote Sensing of Environment*, 2022, 270, 112775. **(ESI Hot and Highly Cited Paper)**
7. **Wei, J.***, Liu, S., Li, Z., Liu, C., Qin, K., Liu, X., Pinker, R., Dickerson, R., Lin, J., Boersma, K., Sun, L., Li, R., Xue, W., Cui, Y., Zhang, C., and Wang, J. Ground-level NO_2 surveillance from space across China for high resolution using interpretable spatiotemporally weighted artificial intelligence. *Environmental Science & Technology*, 2022, 56(14), 9988–9998. **(ESI Highly Cited Paper)**
8. **Wei, J.**, Peng, Y., Mahmood, R., Sun, L., and Guo, J. Intercomparison in spatial distributions and temporal trends derived from multi-source satellite aerosol products. *Atmospheric Chemistry and Physics*, 2019, 19, 7183–7207. **(ESI Highly Cited Paper, Cited By IPCC AR6)**
9. **Wei, J.***, Li, Z., Pinker, R., Wang, J., Sun, L., Xue, W., Li, R., and Cribb, M. Himawari-8-derived diurnal variations of ground-level $PM_{2.5}$ pollution across China using the fast space-time Light Gradient Boosting Machine (LightGBM). *Atmospheric Chemistry and Physics*, 2021, 21, 7863–7880. **(ESI Highly Cited Paper)**
10. **Wei, J.***, Li, Z., Xue, W., Sun, L., Fan, T., Liu, L., Su, T., and Cribb, M. The ChinaHighPM_{10} dataset: generation, validation, and spatiotemporal variations from 2015 to 2019 across China. *Environment International*, 2021, 146, 106290. **(ESI Highly Cited Paper)**
11. **Wei, J.***, Sun, L., Huang, B., Bilal, M., Zhang, Z., and Wang, L. Verification, improvement and application of aerosol optical depths in China. Part 1: Inter-comparison of NPP-VIIRS and Aqua-MODIS. *Atmospheric Environment*, 2018, 175, 221–233. **(ESI Highly Cited Paper)**
12. **Wei, J.**, Sun, L., Peng, Y., Wang, L., Zhang, Z., Bilal, M., and Ma., Y. An improved high-spatial-resolution aerosol retrieval algorithm for MODIS images over land. *Journal of Geophysical Research Atmospheres*, 2018, 123(21), 12291–12307. **(Journal Highlight)**
13. **Wei, J.**, Huang, B., Sun, L., Zhang, Z., Wang, L., and Bilal, M. A simple and universal aerosol retrieval algorithm for Landsat series images over complex surfaces. *Journal of Geophysical Research Atmospheres*, 2017, 122(24), 13338–13355.
14. **Wei, J.**, Huang, W., Li, Z., Sun, L., Zhu, X., Yuan, Q., Liu, L., and Cribb, M. Cloud detection for Landsat imagery by combining the random forest and super-pixels extracted via energy-driven sampling segmentation approaches. *Remote Sensing of Environment*, 2020, 248, 112005.
15. **Wei, J.***, Li, Z., Wang, J., Li, C., Gupta, P., and Cribb, M. Ground-level gaseous pollutants (NO_2, SO_2, and CO) in China: daily seamless mapping and spatiotemporal variations. *Atmospheric Chemistry and Physics*, 2023, 23, 1511–1532.

16. **Wei, J.***, Li, Z., Sun, L., Xue, X., Ma, Z., Liu, L., Fan, T., and Cribb, M. Extending the EOS long-term $PM_{2.5}$ data records since 2013 in China: application to the VIIRS Deep Blue aerosol products. *IEEE Transactions on Geoscience and Remote Sensing*, 2022, 60, 4100412.
17. **Wei, J.**, Li, Z., Peng, Y., Sun, L., and Yan, X. A regionally robust high-spatial-resolution aerosol retrieval algorithm for MODIS images over Eastern China. *IEEE Transactions on Geoscience and Remote Sensing*, 2019, 57(7), 4748–4757.
18. **Wei, J.**, Li, Z., Sun, L., Yang, Y., Zhao, C., and Cai, Z. Enhanced aerosol estimations from Suomi-NPP VIIRS images over heterogeneous surfaces. *IEEE Transactions on Geoscience and Remote Sensing*, 2019, 57(12), 9534–9543.
19. **Wei, J.**, Li, Z., Sun, L., Peng, Y., Zhang, Z., Li, Z., Su, T., Feng, L., Cai, Z., and Wu, H. Evaluation and uncertainty estimate of the next-generation geostationary meteorological Himawari-8/AHI aerosol products. *Science of the Total Environment*, 2019, 692, 879–891.
20. **Wei, J.***, Li, Z., Sun, L., Peng, Y., Liu, L., He, L., Qin, W., and Cribb, M. MODIS Collection 6.1 3 km resolution aerosol optical depth product: global evaluation and uncertainty analysis. *Atmospheric Environment*, 2020, 240, 117768.
21. **Wei, J.**, Li, Z., Sun, L., Peng, Y., and Wang, L. Improved merge schemes for MODIS Collection 6.1 Dark Target and Deep Blue combined aerosol products. *Atmospheric Environment*, 2019, 202, 315–327.
22. **Wei, J.**, Peng, Y., Guo, J., and Sun, L. Performance of MODIS Collection 6.1 Level 3 aerosol products in spatial-temporal variations over land. *Atmospheric Environment*, 2019, 206, 30–44.
23. **Wei, J.**, and Sun, L. Comparison and evaluation of different MODIS aerosol optical depth products over Beijing-Tianjin-Hebei region in China. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 2017, 10(3), 835–844.
24. **Wei, J.***, Ming, Y., Jia, Q., and Yang, D. Simple mineral mapping algorithm based on multi-type spectral diagnostic absorption features: a case study at Cuprite, Nevada. *Journal of Applied Remote Sensing*, 2017, 11(2).
25. **Wei, J.***, Ming, Y., Han, L., Ren, Z., and Guo, Y. Method of remote sensing identification for mineral types based on multiple spectral characteristic parameters matching. *Spectroscopy and Spectral Analysis*, 2015, 35(10), 2862-2866.
26. Cai, M., **Wei, J.**[#], Zhang, S., Liu, W., Wang, L., Qian, Z., Lin, H., Liu, E., McMillin, S., Cao, Y., and Yin, P. Short-term air pollution exposure associated with death from kidney diseases: a nationwide time-stratifed case-crossover study in China from 2015 to 2019. *BMC Medicine*, 2023, 21, 32.
27. Cai, M., Lin, X., Wang, X., Zhang, S., Qian, Z., McMillin, S., Aaron, H., Lin, H., **Wei, J.***, Zhang, Z., and Pan, J. Ambient particulate matter pollution of different sizes associated with recurrent stroke hospitalization in China: A cohort study of 1.07 million stroke patients. *Science of The Total Environment*, 2023, 856, 159104.
28. Chen, L., Gao, D., Ma, T., Chen, M., Li, Y., Ma, Y., Wen, B., Jiang, J., Wang, X., Zhang, J., Chen, S., Wu, L., Li, W., Liu, X., Guo, X., Huang, S., **Wei, J.***, Song, Y., Ma, J., and Dong, Y. Ambient gaseous pollutant exposure and incidence of visual impairment among children and adolescents: fndings from a longitudinal, two-center cohort study in China. *Environmental Science and Pollution Research*, 2022, 29, 73262–73270.
29. Guo, H., Li, X., Li, W., Wu, J., and **Wei, J.*** Climatic modification effects on the association between PM1 and lung cancer incidence in China. *BMC Public Health*, 2021, 21, 880.
30. He, F., **Wei, J.**[#], Dong, Y., Liu, C., Zhao, K., Peng, W., Lu, Z., Zhang, B., Xue, F., Guo, X., and Jia, X. Associations of ambient temperature with mortality for ischemic and hemorrhagic stroke and the modification effects of greenness in Shandong Province, China. *Science of The Total Environment*, 2022, 851, 158046.
31. He, L., Wang, L., Li, Z., Jiang, D., Sun, L., Liu, D., Liu, L., Yao, R., Zhou, Z., and **Wei, J.*** VIIRS Environmental Data Record and Deep Blue aerosol products: validation, comparison, and spatiotemporal variations from 2013 to 2018 in China. *Atmospheric Environment*, 2021, 250, 118265.
32. Hu, M., **Wei, J.**[#], Hu, Y., Guo, X., Li, Z., Liu, Y., Li, S., Xue, Y., Li, Y., Liu, M., Wang, L., and Liu, X. Long-term effect of submicronic particulate matter (PM_1) and intermodal particulate matter ($PM_{1\text{-}2.5}$) on incident dyslipidemia in China: A nationwide 5-year cohort study. *Environmental Research*, 2023, 216, 114860.
33. Li, M., Edgell, R., **Wei, J.**[#], Li, H., Qian, Z., Feng, J., Tian, F., Wang, X., Xin, Q., Cai, M., and Lin, H. Air pollution and stroke hospitalization in the Beibu Gulf Region of China: A case-crossover analysis. *Ecotoxicology and Environmental Safety*, 2023, 255, 114814.
34. Li, S., **Wei, J.**[#], Hu, Y., Liu, Y., Hu, M., Shi, Y., Xue, Y., Liu, M., Xie, W., Guo, X., and Liu, X. Long-term effect of intermediate particulate matter ($PM_{1\text{-}2.5}$) on incident asthma among middle-aged and elderly adults: A national population-based longitudinal study. *Science of The Total Environment*, 2023, 859, 160204.
35. Li, X., Xue, W., Wang, K., Che, Y., and **Wei, J.*** Environmental regulation and synergistic effects of $PM_{2.5}$ control in China. *Journal of Cleaner Production*, 2022, 337, 130438.

36. Lin, H., Zhu, J., Jiang, P., Cai, Z., Yang, X., Zhou, Z., and **Wei, J.*** Assessing drivers of coordinated control of ozone and fine particulate pollution: Evidence from Yangtze River Delta in China. *Environmental Impact Assessment Review*, 2022, 96, 106840.
37. Liu, W., Cai, M., Long, Z., Tong, X., Li, Y., Wang, L., Zhou, M., **Wei, J.***, Lin, H., and Yin, P. Association between ambient sulfur dioxide pollution and asthma mortality: Evidence from a nationwide analysis in China. *Ecotoxicology and Environmental Safety*, 2023, 249, 114442.
38. Liu, W., **Wei, J.**#, Cai, M., Qian, Z., Long, Z., Wang, L., Vaughn, M., Aaron, H., Tong, X., Li, Y., Yin, P., Lin, H., and Zhou, M. Particulate matter pollution and asthma mortality in China: A nationwide time-stratified case-crossover study from 2015 to 2020. *Chemosphere*, 2022, 308, 136316.
39. Lu, D., Mao, W., Zheng, L., Xiao, W., Zhang, L., and **Wei, J.*** Ambient $PM_{2.5}$ estimates and variations during COVID-19 pandemic in the Yangtze River Delta using machine learning and big data. *Remote Sensing*, 2021, 13(8), 1423.
40. Pang, S., Sun, L., Tian, Y., Ma, Y., and **Wei, J.*** Convolutional neural network-driven improvements in global cloud detection for Landsat 8 and transfer learning on Sentinel-2 imagery. *Remote Sensing*, 2023, 15(6), 1706.
41. Song, J., Ding, Z., Zheng, H., Xu, Z., Cheng, J., Pan, R., Yi, W., **Wei, J.***, and Su, H. Short-term PM_1 and $PM_{2.5}$ exposure and asthma mortality in Jiangsu Province, China: What's the role of neighborhood characteristics? *Ecotoxicology and Environmental Safety*, 2022, 241, 113765.
42. Song, J., Du, P., Yi, W., **Wei, J.**#, Fang, J., Pan, R., Zhao, F., Zhang, Y., Xu, Z., Sun, Q., Liu, Y., Chen, C., Cheng, J., Liu, Y., Li, T., Su, H., and Shi, X. Using an exposome-wide approach to explore the impact of urban environments on blood pressure among adults in Beijing–Tianjin–Hebei and surrounding areas of China. *Environmental Science & Technology*, 2022, 56, 8395−8405.
43. Sun, L., **Wei, J.***, Duan, D., Guo, Y., Yang, D., Jia, C., and Mi, X. Impact of land-use and land-cover change on urban air quality in representative cities of China. *Journal of Atmospheric and Solar-Terrestrial Physics*, 2016, 142, 43–54. **[111]**
44. Sun, L., **Wei, J.***, Bilal, M., Tian, X., Jia, C., Guo, Y., and Mi, X. Aerosol optical depth retrieval over bright areas using Landsat 8 OLI images. *Remote Sensing*, 2016, 8(1), 23. **[110]**
45. Sun, L., **Wei, J.***, Wang, J., Mi, X., Guo, Y., Lv, Y., Yang, Y., Gan, P., Zhou, X., Jia, C., and Tian, X. A universal dynamic threshold cloud detection algorithm (UDTCDA) supported by a prior surface reflectance database. *Journal of Geophysical Research Atmospheres*, 2016, 121(12), 7172–7196.
46. Sun, Z., **Wei, J.**#, Zhang, N., He, Y., Sun, Y., Liu, X., Yu, H., and Sun, L. Retrieving high-resolution aerosol optical depth from GF-4 PMS imagery in Eastern China. *Remote Sensing*, 2021, 13, 3752.
47. Tian, X., Liu, Q., Gao, Z., Wang, Y., Li, X., and **Wei, J.*** Improving MODIS aerosol estimates over land with the surface BRDF reflectances using the 3-D discrete cosine transform and RossThick-LiSparse models. *IEEE Transactions on Geoscience and Remote Sensing*, 2021, 59(12), 9851-9860.
48. Wang, L., Zhang, J., **Wei, J.**#, Zong, J., Lu, C., Du, Y., and Wang, Q. Role of liver enzymes in the relationship between particulate matter exposure and diabetes risk: a longitudinal cohort study. *Environmental Pollution*, 2022, 312, 120020.
49. Wang, X., Guo, B., Yang, X., Li, J., Baima, Y., Yin, J., Yu, J., Xu, H., Zeng, C., Feng, S., **Wei, J.***, Hong, F., and Zhao, X. Role of liver enzymes in the relationship between particulate matter exposure and diabetes risk: a longitudinal cohort study. *Journal of Clinical Endocrinology & Metabolism*, 2022, 107, e4086–e4097.
50. Wang, X., Xu, Z., Ho, H., Song, Y., Zheng, H., Hossain, M., Khan, M., Bogale, D., **Wei, J.***, and Cheng, J. Ambient particular matters (PM_1, $PM_{2.5}$, PM_{10}) and childhood pneumonia: the smaller particle, the greater short-term impact? *Science of the Total Environment*, 2021, 772, 145509.
51. Wang, Y., **Wei, J.**#, Zhang, Y., Guo, T., Chen, S., Wu, W., Chen, S., Li, Z., Qu, Y., Xiao, J., Deng, X., Liu, Y., Du, Z., Zhang, W., and Hao, Y. Estimating causal links of long-term exposure to particulate matters with all-cause mortality in South China. *Environment International*, 2023, 171, 107726.
52. Wang, Y., Cao, R., Xu, Z., Jin, J., Wang, J., Yang, T., **Wei, J.***, Huang, J., and Li, G. Long-term exposure to ozone and diabetes incidence: A longitudinal cohort study in China. *Science of the Total Environment*, 2022, 816, 151634.
53. Wu, H., Zhang, B., **Wei, J.**#, Lu, Z., Zhao, M., Liu, W., Bovet, P., Guo, X., and Xi, B. Short-term effects of exposure to ambient PM_1, $PM_{2.5}$, and PM_{10} on ischemic and hemorrhagic stroke incidence in Shandong Province, China. *Environmental Research*, 2022, 212, 113350.
54. Wu, H., Zhang, Y., Zhao, M., Liu, W., Magnussen, C., **Wei, J.***, and Xi, B. Short-term effects of exposure to ambient PM_1 on blood pressure in children and adolescents aged 9 to 18 years in Shandong Province, China. *Atmospheric Environment*, 2022, 283, 119180.

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