

Zhi-Bo Li (李智博)

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PERSONAL

Web of Science Researcher ID: AAK-4293-2020

[Google Scholar](#) [Research Gate](#) [Publons](#) [ORCID](#)

EDUCATION

2020.09-2024.06, Ph.D., Peking University

Major: Atmospheric Science (Physical Oceanography)

Thesis: Evolution of terrestrial aridity and monsoon over the past 250 million years

Advisor: [Prof. Yongyun Hu](#)

2016.09-2019.06, M.S., Nanjing University of Information Science & Technology (NUIST)

Major: Meteorology

Thesis: Relative roles of dynamic and thermodynamic processes in causing positive and negative global mean SST trends during the past 100 years.

Advisors: [Prof. Tim Li](#) and [Dr. Ying Sun](#)

2012.09-2016.06, B.S., NUIST

Major: Atmospheric Science

Thesis: Relationship between ENSO and precipitation in Papua New Guinea.

Advisor: Prof. Li Tao

WORK EXPERIENCES

2024.09-Now, Researcher, Regional Climate Group, Department of Earth Sciences, University of Gothenburg

Cooperators: [Prof. Deliang Chen](#) and [Dr. Céline Heuzé](#)

2019.08-2020.08, Research Assistant, Institute of Atmospheric Physics, Chinese Academy of Sciences.

Cooperator: [Prof. Wen Chen](#)

TEACHING EXPERIENCES

2021.09-2022.01, TA, 48hours (including 12 hours personal teaching), **Weather analysis and forecast**, Peking University

RESEARCH INTERESTS

Wind Speed; Global Warming; Paleoclimatology; Monsoon; Aridity; Climate Model; Atmospheric Teleconnection

SERVICES/COMMITTEES

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AWARDS

2022 The Third Prize of Peking University Scholarship (@PKU)

2022 Award for Scientific Research (@PKU)

2020 Excellent Master's Thesis (@NUIST)

2018 The Second Prize University's Scholarship (@NUIST)

SCIENTIFIC PAPERS

Corresponding author (*)

Co-first author (#)

Google Scholar (2024/10/22): Citations: 376, H-index: 11

Under review

1. **Zhi-Bo Li**, Yongyun Hu*, Qiang Fu, Xiujuan Bao, Jian Zhang, Xiang Li, Jiaqi Guo, Qifan Lin, Shuai Yuan, Jiawenjing Lan, Jing Han, Shiyan Zhang, Qiang Wei, Yonggang Liu, Jun Yang, Ji Nie, Zhengtang Guo. Terrestrial aridity and dryland evolutions since Pangea. Submitted to *Paleo2*
2. Cheng Shen, Huishuang Yuan, **Zhi-Bo Li**, Jinling Piao, Youli Chang, Deliang Chen*. Uncertainty induced by internal variability in South Asian near-surface wind speed projections. Submitted to *QJRMS*
3. Peng Hu, Wen Chen*, **Zhi-Bo Li**, Shangfeng Chen, Ming Sun, Lin Wang, Yuyun Liu. Distinct features of the tropical synoptic-scale waves before and after the South China Sea summer monsoon onset: role of the mean flow. Submitted to *GRL*

2024

1. Cheng Shen, **Zhi-Bo Li***, Fei Liu, Hans, W. Chen, Deliang Chen*. Robust reduction in subtropical terrestrial near-surface wind speed after tropical volcanic eruptions. *The Innovation*, Accepted.
2. Yadong Lei, Zhili Wang*, Yangyang Xu, Xiaochao Yu, Chenguang Tian, **Zhi-Bo Li**, Lei Li, Junting Zhong, Lifeng Guo, Lin Liu, Deying Wang, Huizheng Che, Xiaoye Zhang. Global solar droughts due to supply-demand imbalance exacerbated by anthropogenic climate change. *Geophysical Research Letters*, Accepted.
3. **Zhi-Bo Li**, Yang Xu, Hui-Shuang Yuan, Youli Chang, Cheng Shen*. AMO footprint of the recent near-surface wind speed change over China. *Environmental Research Letters*, 19(11), 114031. <https://doi.org/10.1088/1748-9326/ad7ee4>
4. Shiwei Jiang, Xin Zhou*, Jasper F. Kok, Qifan Lin, Yonggang Liu, Tao Zhan, Yanan Shen, **Zhi-Bo Li**, Xuanqiao Liu, Anze Chen, Luo Wang, Wen Chen, John P. Smol, Zhengtang Guo. *Earth-Science Reviews*, 250, 104937. <https://doi.org/10.1016/j.earscirev.2024.104937>
5. Qingyu Cai, Wen Chen*, Shangfeng Chen, Tianjiao Ma, Xiadong An, **Zhi-Bo Li**. Strengthened impact of El Niño-Southern Oscillation on Eurasian teleconnection Pattern since the late-1980s. *Journal of Climate*. <https://doi.org/10.1175/JCLI-D-23-0402.1>

6. Cheng Shen, **Zhi-Bo Li**, Yadong Lei, Yue Yu, Deliang Chen*. Increases of offshore wind potential in a warming world. *Geophysical Research Letters*, 51(14), e2024GL109494. <https://doi.org/10.1029/2024GL109494> (AGU Featured Research) (The Guardian)
7. Shuai Yuan#, Yonggang Liu#, Yongyun Hu*, Jie Mei, Jing Han, Xiujuan Bao, Xiang Li, Qifan Lin, Mengyu Wei, **Zhi-Bo Li**, Zihan Yin, Kai Man, Jiaqi Guo, Yue Liu, Jiacheng Wu, Jian Zhang, Qiang Wei, Jun Yang, Ji Nei. Controlling factors for the Global Meridional Overturning Circulation: a lesson from the Paleozoic. *Science Advances*, 10(26), adm7813. <https://doi.org/10.1126/sciadv.adm7813>
8. **Zhi-Bo Li**, Yongyun Hu*, Jian Zhang, Xiang Li, Jiaqi Guo, Jiawenjing Lan, Qifan Lin, Shuai Yuan, Mengyu Wei, Zihan Yin, Qiang Wei, Xiujuan Bao, Jing Han, Jun Yang, Yonggang Liu, Ji Nie. The Pacific-North American teleconnection in the Cenozoic. *Global and Planetary Change*, 235, 104402. <https://doi.org/10.1016/j.gloplacha.2024.104402>
9. Yue Yu, **Zhi-Bo Li***, Zixiang Yan, Huishuang Yuan, Cheng Shen*. Projected emergence season of year-maximum near-surface wind speed. *Geophysical Research Letters*, 51(2), e2023GL107543. <https://doi.org/10.1029/2023GL107543>

2023

10. Cheng Shen, Huishuang Yuan, **Zhi-Bo Li**, Xiaoye Yang, Lorenzo Minola, Youli Chang*, Deliang Chen*. March Near-surface Wind Speed Hiatus over China since 2011. *Geophysical Research Letters*, 50(15), e2023GL104230. <https://doi.org/10.1029/2023GL104230>
11. Shiwei Jiang, Xin Zhou*, **Zhi-Bo Li**, Luyao Tu, Anze Chen, Xuanqiao Liu, Min Ding, Guangcheng Zhang. Increased effective radiative forcing enhanced the modulating effect of Pacific Decadal Oscillation on late Little Ice Age precipitation in Jiang-Huai region, China. *Climate Dynamics*, 61, 4173-4183. <https://doi.org/10.1007/s00382-023-06805-8>
12. Shangfeng Chen, Wen Chen*, Bin Yu, Liang Wu, Lin Chen, **Zhi-Bo Li**, Hasi Aru, Jingliang Huangfu. Impact of the winter Arctic sea ice anomaly on the following summer tropical cyclone genesis frequency over the western North Pacific. *Climate Dynamics*, 61, 3971-3988. <https://doi.org/10.1007/s00382-023-06789-5>
13. Shiwei Jiang, Xin Zhou*, Julian Sachs, **Zhi-Bo Li**, Luyao Tu, Yiyi Lin, Xuanqiao Liu, Anze Chen, Yanan Shen. The mean state of the tropical Pacific Ocean differed between the Medieval Warm Period and the Industrial Era. *Communications Earth & Environment*, 4(1), 74. <https://doi.org/10.1038/s43247-023-00734-4>
14. Jing Han, Ji Nie*, Yongyun Hu*, William Boos, Yonggang Liu, Jun Yang, Shuai Yuan, Xiang Li, Jiaqi Guo, Jiawenjing Lan, Qifan Lin, Xiujuan Bao, Mengyu Wei, **Zhi-Bo Li**, Kai Man, Zihan Yin. Continental drift shifts tropical rainfall by altering radiation and ocean heat transport. *Science Advances*, 9(10), eadf7209. <https://doi.org/10.1126/sciadv.adf7209>

15. Xiujuan Bao, Yongyun Hu*, Christopher R. Scotese, Xiang Li, Jiaqi Guo, Jiawenjing Lan, Qifan Lin, Shuai Yuan, Mengyu Wei, **Zhi-Bo Li**, Kai Man, Zihan Yin, Jing Han, Jian Zhang, Qiang Wei, Yonggang Liu, Jun Yang, Ji Nie. Quantifying climate conditions for the formation of coals and evaporites. *National Science Review*, 10(6), nwad051. <https://doi.org/10.1093/nsr/nwad051>

2022

16. Cheng Shen, Jinlin Zha, **Zhi-Bo Li**, Cesar Azorin-Molina, Kaiqiang Deng, Lorenzo Minola, Deliang Chen*. Evaluation of global terrestrial near-surface wind speed simulated by CMIP6 models and their future projections. *Annals of the New York Academy of Sciences*, 1518(1), 249-263. <https://doi.org/10.1111/nyas.14910>
17. Tianjiao Ma, Wen Chen*, Shangfeng Chen, Chaim I. Garfinkel, Shuoyi Ding, Lei Song, **Zhi-Bo Li**, Yulian Tang, Jingliang Huangfu, Hainan Gong, Wei Zhao. Different ENSO teleconnections over East Asia in early and late winter: role of precipitation anomalies in the tropical Indian Ocean–far western Pacific. *Journal of Climate*, 35(24), 4319-4335. <https://doi.org/10.1175/JCLI-D-21-0805.1>
18. Shiyang Zhang, Yongyun Hu*, **Zhi-Bo Li**. Recent changes and future projection of precipitation in Northwest China (in Chinese). *Climate Change Research*, 18(6), 683-694. <https://doi.org/10.12006/j.issn.1673-1719.2021.281>
19. Xiang Li, Yongyun Hu*, Jiaqi Guo, Jiawenjing Lan, Qifan Lin, Xiujuan Bao, Shuai Yuan, Mengyu Wei, **Zhi-Bo Li**, Kai Man, Zihan Yin, Jing Han, Jian Zhang, Chenguang Zhu, Zhouqiao Zhao, Yonggang Liu, Jun Yang, Ji Nie. A high-resolution climate simulation dataset for the past 540 million years. *Scientific Data*, 9(1), 371. <https://doi.org/10.1038/s41597-022-01490-4> (ESI highly-cited)
20. Peng Hu, Wen Chen*, **Zhi-Bo Li**, Shangfeng Chen, Lin Wang, Yuyun Liu. Close linkage of the South China Sea summer monsoon onset and extreme rainfall in May over Southeast Asia: role of the synoptic-scale systems. *Journal of Climate*, 35(13), 4347-4362. <https://doi.org/10.1175/JCLI-D-21-0740.1>
21. Shangfeng Chen, Wen Chen*, Bin Yu, **Zhi-Bo Li**. Impact of internal climate variability on the relationship between spring northern tropical Atlantic SST anomalies and succedent winter ENSO: the role of the North Pacific Oscillation. *Journal of Climate*, 35(2), 537-559. <https://doi.org/10.1175/JCLI-D-21-0505.1>

2021

22. Jinlin Zha, Cheng Shen, **Zhi-Bo Li**, Jian Wu, Deming Zhao*, Wenxuan Fan, Ming Sun, Cesar Azorin-Molina, Kaiqiang Deng. Projected changes in global terrestrial near-surface wind speed in 1.5-4.0 °C global warming levels. *Environmental Research Letters*, 16(11), 114016. <http://doi.org/10.1088/1748-9326/ac2fdd>
23. **Zhi-Bo Li**, Ying Sun*, Tim Li, Wen Chen, Yihui Ding. Projections of South Asian summer monsoon under global warming from 1.5° to 5 °C. *Journal of Climate*, 34(19), 7913-7926. <https://doi.org/10.1175/JCLI-D-20-0547.1>
24. Cheng Shen, Jinlin Zha*, Deming Zhao, Jian Wu, Wenxuan Fan, Mengxi Yang, **Zhi-Bo Li**. Estimating centennial-scale changes in global terrestrial near-surface

wind speed based on CMIP6 GCMs. *Environmental Research Letters*, 16(8), 084039. <http://doi.org/10.1088/1748-9326/ac1378>

25. Zhi-Bo Li, Wen Chen*, Shangfeng Chen, Ying Sun*, Danlei Qian. Uncertainty of central China summer precipitation and related natural internal variability under global warming of 1 to 3°C. *International Journal of Climatology*, 41(15), 6640-6653. <http://doi.org/10.1002/joc.7217>

Before 2020

26. Zhi-Bo Li, Ying Sun*, Tim Li, Yihui Ding, Ting Hu. Future changes in East Asian summer monsoon circulation and precipitation under 1.5 to 5°C of warming. *Earth's Future*, 7(12), 1391-1406. <http://doi.org/10.1029/2019EF001276>
27. Zhi-Bo Li, Jia Liu, Tim Li*, Ying Sun. Relative roles of dynamic and thermodynamic processes in causing positive and negative global mean SST trends during the past 100 years. *Dynamics of Atmospheres and Oceans*, 86(c), 18-32. <http://doi.org/10.1016/j.dynatmoce.2019.02.002>

PROJECTS

1. 2024.09-now: Swedish FOMAS: “Would the Northern European enclosure dam really protect Sweden from sea level rise?” (2020-00892). Participant.
2. 2024.09-now: Swedish FOMAS: “Impact of climate variation and change on offshore wind energy potential” (2023-01648). Participant.
3. 2020.05-2024.08: NSFC Project: “Continental Evolution and Monsoon Changes” (41888101). Participant.
4. 2017.12-2021.08: National Key R&D: “Response and scenario prediction of East Asian climate system under global warming 1.5°C” (2017YFA0603802). Participant.

SUPERVISIONS

2022.9–Now: Huishuang Yuan, Bachelor Degree, Dissertation, Yunan University

2023.5–Now: Yang Xu, Bachelor Degree, Dissertation, Yunnan University

2023.9–Now: Ziqi Wang, Bachelor Degree, Dissertation, Peking University

PEER REVIEWER

Environmental Research Communications (3), Environmental Research Letters (3), Journal of Geophysical Research: Atmosphere (1), Measurement Science and Technology (1), The Innovation (1)

SCIENTIFIC PRESENTATION

1. 2023.10 Xian, China. The 13th National Conference on Quaternary Science (Oral)
2. 2023.07 Shanghai, China. The 7th Conference on Earth System Science (Oral)
3. 2023.04 Vienna, Austria. EGU (Poster)
4. 2023.02 Beijing, China. Center for Monsoon System Research, Institute of Atmospheric Physics, Chinese Academy of Sciences (Oral)
5. 2021.11 Beijing, China. The 17th Graduate Academic Salon of the Institute of Atmospheric Physics, Chinese Academy of Sciences (**Invited**, Oral)

6. 2021.07 Shanghai, China. The 6th Conference on Earth System Science (Poster)
7. 2021.04 Vienna, Austria. EGU (Online, Oral)
8. 2020.07 Nanjing, China. 2020 Annual Project Seminar of “Response and scenario prediction of East Asian climate system under global warming 1.5°C” (**Invited**, Oral)
9. 2020.06 Beijing, China. The 3th PKU Undergraduate Online Workshop of Atmospheric Science (**Invited**, Oral)
10. 2019.05 Beijing, China. The 4th CAMS-NUIST Joint Center for Season-to-Seasonal Research (Poster)
11. 2018.12 Nanjing, China. The 4th NUIST-POSTECH-CITYU Joint Workshop on Climate Dynamics & Future Changes (Poster)
12. 2018.03 Nanjing, China. NJU-NUIST Joint Workshop on Climate Dynamics (Poster)
13. 2017.12 Hong Kong, China. The 3rd NUIST-POSTECH-CITYU Joint Workshop on Climate System Interaction & Future Changes (Oral)

VISIT/SEMINAR

1. 2023.8 Beijing, China, PKU Distinguished Lectures on Planetary Atmospheres
2. 2022.8 Beijing, China, PKU Distinguished Lectures on Planetary Atmospheres
3. 2019.10 Beijing, China, 1st International Workshop on Global Monsoons Intercomparison Project
4. 2017.08 Nanjing, China, Advanced Climate Dynamics Lecture Series 2017
5. 2016.06 Nanjing, China, Advanced Climate Dynamics Lecture Series 2016