

Zhiying Li

Department of Geography, 012 Fairchild, Dartmouth College, Hanover, NH, 03755

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EDUCATION

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| 2021 | Ph.D. in Geography
Department of Geography, The Ohio State University, Columbus, OH, USA |
| 2017 | M.S. in Physical Geography
Institute of Geographic Sciences and Natural Resources Research (IGSNRR),
University of Chinese Academy of Sciences (UCAS), Beijing, China |
| 2014 | B.S. in Agriculture in Soil and Water Conservation
College of Natural Resources and Environment, Northwest A&F University,
Yangling, Shaanxi, China |
| Jul-Aug,
2013 | Visiting Student
Department of Agronomy and Horticulture, University of Nebraska-Lincoln,
Lincoln, NE, USA |

ACADEMIC APPOINTMENTS

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| Sept 2021-
present | Postdoctoral Research Associate
Department of Geography, Dartmouth College, Hanover, NH, USA
Advisor: Dr. Justin S. Mankin |
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RESEARCH INTERESTS

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| Hydro-climatology | Drought monitoring |
| Watershed hydrology | Global Climate Change |

PEER-REVIEWED PUBLICATIONS

9. **Zhiying Li***, Steven M. Quiring. 2022. Projection of Streamflow Change Using a Time-Varying Budyko Framework in the Contiguous United States. *Water Resources Research* 58, e2022WR033016. doi: 10.1029/2022WR033016
8. Tengfei Liu, **Zhiying Li**, Can Zhang, Qiu Xia*. 2022. How Comprehensive Innovation Reform Pilot Improve Urban Green Innovation Efficiency? —Evidence from China. *Sustainability* 14(8), 4550. doi: 10.3390/su14084550
7. Jing Wu, Qiu Xia, **Zhiying Li***. 2022. Green innovation and enterprise green total factor productivity at a micro level: A perspective of technical distance. *Journal of Cleaner Production* 344, 131070. doi: 10.1016/j.jclepro.2022.131070
6. **Zhiying Li***, Steven M. Quiring. 2021. Investigating spatial heterogeneity of the controls of surface water balance in the contiguous United States by considering anthropogenic factors. *Journal of Hydrology* 601, 126621. doi: 10.1016/j.jhydrol.2021.126621
5. **Zhiying Li***, Steven M. Quiring. 2021. Identifying the Dominant Drivers of Hydrological Change in the Contiguous United States. *Water Resources Research* 57(5), e2021WR029738.

doi: 10.1029/2021WR029738

4. Ning Zhang, **Zhiying Li***, Xun Zou, Steven M. Quiring. 2019. Comparison of three short-term load forecast models in Southern California. *Energy* 189, 116358. doi: 10.1016/j.energy.2019.116358

3. **Zhiying Li***, Xiao Li, Yue Wang, Steven M. Quiring. 2019. Impact of climate change on precipitation patterns in Houston, Texas, USA. *Anthropocene* 25, 100193. doi: 10.1016/j.ancene.2019.100193

2. **Zhiying Li**, Haiyan Fang*. 2017. Modelling the impact of climate change on watershed discharge and sediment yield in the black soil region, northeastern China. *Geomorphology* 293(Part A), 255-271. doi: 10.1016/j.geomorph.2017.06.005

1. **Zhiying Li**, Haiyan Fang*. 2016. Impacts of climate change on water erosion: a review. *Earth-Science Reviews* 163, 94-117. doi: 10.1016/j.earscirev.2016.10.004

(*corresponding author)

RESEARCH GRANTS

2020 Co-Investigator: National Science Foundation Doctoral Dissertation Research Improvement, Relative Importance of Drivers of River Discharge and Prediction of Flow Regimes across the United States (06/15/2020-11/30/2021, \$17,023); with Steven Quiring (PI)

TEACHING EXPERIENCE

Lab Instructor

Spring 2020, Fall 2019

Extreme Weather and Climate (G1900); 4 sessions

- Introductory course for undergraduates; GE course
- 32 students enrolled

Graduate Teaching Assistant

Spring 2019

Climatology (G5900)

- Advanced course for undergraduates and graduates
- 36 students enrolled

Fall 2018

Global Climate Change (G3900)

- Intermediate course for undergraduates
- 69 students enrolled

Guest Lecturer

Feb 2020

Boundary Layer Climate (G5921)

- Advanced course for undergraduates and graduates
- ~40 students enrolled

AWARDS AND HONORS

2022 Excellent Oral Presentation at the “Young Scientist Forum” Session at the 2022 International Forum on Big Data for Sustainable Development Goals

2022 Travel Grant for the Community Earth System Model (CESM) tutorial, Center Green, University Corporation for Atmospheric Research (UCAR), Boulder, CO

- (~\$1,000)
- 2021 The Story Exchange “Our Women in Science Incentive Prize” (\$5,000)
- 2021 Chinese Government Award for Outstanding Self-financed Students Abroad (\$6,000)
- 2021 The E. Willard & Ruby S. Miller Fellowship, Department of Geography at The Ohio State University (\$4,000)
- 2021 The 1st place poster presentation award in Mathematical and Physical Sciences at the Edward F. Hayes Graduate Research Forum (\$200)
- 2020 The 2nd place student poster presentation award at the 2020 Annual Water Management Association of Ohio Conference (\$100)
- 2020 The 1st place PhD student paper presentation award at the 2020 East Lakes Division of the American Association of Geographers (\$125)
- 2020 American Association of Geographers (AAG) Annual Meeting Student Grant
- 2020 Best Oral Presentation at the 4th annual Midwest Student Conference on Atmospheric Research
- 2019 Graduate School Presidential Fellowship, The Ohio State University (\$32,100)
- 2019 American Meteorological Society Annual Meeting Matthew J. Parker Travel Grant (~\$1,400)
- 2019 Rick Toracinta Graduate Scholarship, The Ohio State University (\$2,000)
- 2017 Graduate School University Fellowship, The Ohio State University (\$26,316)
- 2017 Taaffe Research Award, The Ohio State University (\$2,000)
- 2017 Outstanding Graduate, IGSNRR, UCAS (Top 1%)
- 2017 “Institute Director” Scholarship, IGSNRR, UCAS (Top 3%)
- 2016 1st Class (Top) Academic Scholarship, IGSNRR, UCAS
- 2014 Outstanding Graduate, Northwest A&F University (Top 1%)

PROFESSIONAL EXPERIENCE

- Sept 2021- **Postdoctoral Research Associate**, Dept. of Geography, Dartmouth College
 Project: “Regional influences of vegetation on complex droughts in North America” funded by NOAA
- Assessing Static Drought Monitoring Ability in a Nonstationary Climate
- Feb-Aug, 2021 **Graduate Research Assistant**, Dept. of Geography, The Ohio State University
 Project: “Climate Resilience Project” funded by the American Honda Company
- Modeling flooding risk to facilities under climate change scenarios
- 2018-2020 **Graduate Teaching Assistant**, Dept. of Geography, The Ohio State University
- Teaching four climate-related courses
- Jun-Aug, 2019 **Graduate Research Assistant**, Dept. of Geography, The Ohio State University
 Project: “Deployment of Storm Impact Prediction Model” funded by the Southern Company
- Data processing for spatially generalized hurricane outage prediction model
 - Running storm wind models using R and analyzing tree trimming factors

SELECTED CONFERENCE PRESENTATIONS

2022 Virtual Oral Presentation on “Predicting streamflow change under climate and land use changes in the contiguous U.S. using a time-varying Budyko framework and machine learning algorithms” in the 2022 International Forum on Big Data for Sustainable Development Goals, September 6-8

Virtual Oral Presentation on “Accounting for the climatology of drought characteristics in the contiguous United States” in the AAG 2022 Annual Meeting, February 25-March 1

2021 Virtual Poster Presentation on “Uncertainty in the Gridded Daily Temperature Datasets for Estimation of Potential Evapotranspiration Values and Trends in the Continental United States” in the Edward Hayes Graduate Research Forum, April 9

Virtual Oral Presentation on “Uncertainty in the Gridded Daily Temperature Datasets for Estimation of Potential Evapotranspiration Values and Trends in the Continental United States” in the AAG 2021 Annual Meeting, April 7-11

Virtual Poster Presentation on “Climatic, physiographic, and anthropogenic factors controlling spatial and temporal variability of water balance within the Budyko framework” in the AMS 2021 Annual Meeting, Jan 10-15

2020 Virtual Poster Presentation on “Climatic, physiographic, and anthropogenic factors controlling spatial and temporal variability of water balance within the Budyko framework” in the AGU 2020 Fall Meeting, December 1-17

Virtual Poster Presentation on “Identifying the Dominant Drivers of Hydrological Change in the Contiguous United States” in the 2020 Annual Water Resources Conference, November 9-12

Virtual Poster Presentation on “Identifying the Dominant Drivers of Hydrological Change in the Contiguous United States” in the 49th Annual Water Management Association of Ohio Conference, November 2-5

Virtual Oral Presentation on “Climatic, physiographic, and anthropogenic factors controlling spatial and temporal variability of water balance within the Budyko framework” in the 14th Graduate Climate Conferences, October 30-November 1

Virtual Oral Presentation on “Developing Impacts-Based Drought Thresholds in Ohio” in the 2020 East Lakes Division of the American Association of Geographers, October 29-30

Virtual Poster Presentation on “Developing Impacts-Based Drought Thresholds in Ohio” in the 2020 Byrd Center Symposium on Climate Change, October 9

Virtual Oral Presentation on “Developing Impacts-Based Drought Thresholds in Ohio” in the 4th annual Midwest Student Conference on Atmospheric Research, September 26-27

Virtual Poster Presentation on “Developing Impacts-Based Drought Thresholds in Ohio” in the 2020 National Soil Moisture Workshop, August 12-13

2019 Poster Presentation on “Comparison of three short-term load forecast models in Southern California” in the 2019 Translational Data Analytic Institute Fall Forum, Columbus, OH, USA, November 7

Poster Presentation on “Spatio-temporal hydroclimatic variability in Ohio, USA” in the inaugural Byrd Center Symposium on Climate Change, Columbus, OH, USA, March 22

2018 Poster Presentation on “Spatio-temporal hydroclimatic variability in Ohio, USA” in the AGU 2018 Fall Meeting, Washington D.C., USA, December 10-14

MANUSCRIPT REVIEWER

Journal of Environmental Management	IF: 8.910, 1 review
Catena	IF: 6.280, 2 reviews
Journal of Hydrology: Regional Studies	IF: 5.119, 4 reviews
Scientific Reports	IF: 4.996, 2 reviews
Economic Modelling	IF: 3.875, 1 review
Intl. Journal of Environmental Research and Public Health	IF: 3.390, 1 review
PeerJ	IF: 3.061, 3 reviews
Utilities Policy	IF: 2.812, 5 reviews
Physical Geography	IF: 2.086, 3 reviews
Environmental Engineering and Management Journal	IF: 0.940, 1 review

EDITORSHIP

Assistant Editor, Anthropocene Science, Jan. 2022-present

PROFESSIONAL SERVICE

2022 Judge, Climate Specialty Group, Student Paper Competition, Annual Meeting of the Association of American Geographers

DEPARTMENTAL SERVICE

2020-2021 Treasurer, OSU Geography Graduate Organization
2020 Invited interviewee, Department of Teaching and Learning, OSU
2019 Volunteer for GeoWeek, Department of Geography, The Ohio State University
2019 Judge for undergraduate art pieces as an extra credit activity for G1900, Department of Geography, The Ohio State University

EXTRA TRAINING

2022 Ohio Professional Development Consortium Inclusive Teaching Endorsement (ongoing)
2022 Workshops in Academic Job Search Series, Dartmouth College, Hanover, NH
2022 Community Earth System Model (CESM) tutorial, Center Green, University

Corporation for Atmospheric Research (UCAR), Boulder, CO
2020 Workshops in Academic Job Search Series, The Ohio State, Columbus, OH
2020 AMS short course “*Introduction to Machine Learning in Python for Environmental Science Problems*”, Boston, MA

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

2018-present American Geophysical Union (AGU)
2021-present American Association of Geographers (AAG)
2021-present AAG Climate Specialty Group
2021 AAG Graduate Student Affinity Group
2021 American Meteorological Society (AMS)
2020 Water Management Association of Ohio (WMAO)

TECHNICAL SKILLS

Programming: Python, R, MATLAB, JavaScript

GIS & Geospatial software: Google Earth Engine, ArcGIS, GeoDa, ENVI, IDRISI

Hydrological Model: SWAT, TETIS, HEC-HMS

Statistical software: JMP, SPSS

Languages: Full Professional English, Native Mandarin, Limited Working Cantonese

Others: Origin, Auto CAD, MS Office Suite