Update: 2023-03-20

Zhiying Li

Department of Geography, 012 Fairchild, Dartmouth College, Hanover, NH, 03755
E-mail: Zhiying.Li@dartmouth.edu; **Personal website:** zhiyingli-geo.com

EDUCATION

2021	**Ph.D. in Geography** Department of Geography, The Ohio State University, Columbus, OH, USA Advisor: Dr. Steven M. Quiring
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

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

RESEARCH INTERESTS

Hydroclimatology	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

2023 Virtual Oral Presentation on "Static Drought Assessment in a Nonstationary Climate" in the American Association of Geographers (AAG) 2023 Annual Meeting, March 23-27

2022 Oral Presentation on "Static Drought Assessment in a Nonstationary Climate" in the American Geophysical Union (AGU) 2022 Annual Meeting, Chicago, IL, USA, December 12-16

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

Sustainable Cities and Society	IF: 10.696, 1 review
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
The Professional Geographer	IF: 2.411, 1 review
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

2023	Chair, "Hazards, Risks, and Disasters: Resilience and Adaption to a Changing Climate" Session, Annual Meeting of the Association of American Geographers
2022-2023	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

2023	NOAA Drought Assessment in a Changing Climate Technical Workshop
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