

Jingwen Wu

PERSONAL INFORMATION

Pacific Climate Impacts Consortium

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Education:

2020 PhD Faculty of Geographical Science, Beijing Normal University, China

2017 MSc Faculty of Geographical Science, Beijing Normal University, China

2013 BSc College of Resources and Environment, Shandong Agricultural University, China

Employment/Affiliations:

04, 2021–09, 2023 Post-Doctoral Research Fellow, Environmental Science, University of Northern British Columbia, Canada

09, 2023–09, 2024 Postdoctoral Research Hydrologist, University of Victoria, Canada

RESEARCH INTERESTS:

Hydrology, Hydrometeorology, Hydrologic modeling, Drought detection and attribution and Climate change and human activities.

PUBLICATIONS:

- 1) Wu, J.W., Yen, H., Arnold, J.G., Yang, Y.E., Cai, Ximing., White, M.J., Chinnasamy, S., Miao, C.Y., Srinivasan, R., 2019. Development of Reservoir Operation Functions in SWAT+ for National Water Quantity and Quality Assessments. *Journal of Hydrology*, in press, doi: 10.1016/j.jhydrol.2020.124556.
- 2) Wu, J.W., Miao, C.Y., Zheng, H.Y., Duan, Q.Y., Lei, X.H., Li, H., 2018. Meteorological and hydrological drought on the Loess Plateau, China: Evolutionary characteristics, impact, and propagation. *Journal of Geophysical Research: Atmospheres*, 123, 11,569–11,584.
- 3) Wu, J.W., Miao, C.Y., Zhang, X.M., Yang, T.T., Duan, Q.Y., 2017. Detecting the quantitative hydrological response to changes in climate and human activities. *Science of the Total Environment*, 586: 328–337.
- 4) Wu, J.W., Miao, C.Y., Wang, Y.M., Duan, Q.Y., Zhang, X.M., 2017. Contribution analysis of the long-term changes in seasonal runoff on the Loess Plateau, China, using eight Budyko-based methods. *Journal of Hydrology*, 545: 263–275.

- 5) Wu, J.W., Miao, C.Y., Duan, Q.Y., Lei, X.H., Li, H., 2019. Dynamics and attributions of baseflow in the semiarid Loess Plateau. *Journal of Geophysical Research: Atmospheres*, 124, 3684–3701.
- 6) Wu, J.W., Zheng, H.Y., Xi, Y., 2019. SWAT-Based Runoff Simulation and Runoff Responses to Climate Change in the Headwaters of the Yellow River, China. *Atmosphere* 2019, 10(9), 509.
- 7) Wu, J.W., Miao, C.Y., Tang, X., Duan, Q.Y., He, X.J., 2018. A nonparametric standardized runoff index for characterizing hydrological drought on the Loess Plateau, China. *Global and Planetary Change*, 161: 53–65.
- 8) Wu, J.W., Miao, C.Y., Yang, T.T., Duan, Q.Y., Zhang, X.M., 2018. Modeling streamflow and sediment responses to climate change and human activities in the Yanhe River, China. *Hydrology Research*, 49 (1).
- 9) Wu, J.W., Miao, C.Y., Duan, Q.Y., Gou, J.J., Zheng, H.Y., 2023. Quantifying seasonal hydrological response to climate change and human activities on the Songhua River basin under the Budyko framework. Submitted to *Journal of Cleaner Production*.
- 10) Wu, J.W., and Déry, S. J., 2023. Future hydrological changes over the Nechako watershed at different global warming levels. (in preparation).

SKILLS:

Facility with the professional software grasped include programming language (MATLAB, R, Python), graph (Origin, Photoshop, Adobe Illustrator), GIS (ArcView, ArcGIS), hydrological model (SWAT, VIC, Budyko model) and High performance computing.

AWARDS:

- First-class scholarship, Beijing Normal University (2015)
- Scholarship for excellent PhD candidate, Beijing Normal University (2017)
- Postgraduates outstanding academic poster award, Beijing Normal University (2018)
- National graduate program for high-level universities scholarship (2018)
- National scholarship, China (2019)
- Outstanding graduate of Beijing Normal University (2020)

RESEARCH PROJECTS:

- 2021–2023, *Future projection of hydrology over Nechako River Basin, Canada*.
Main project participant, sponsored by Natural Sciences and Engineering Research Council of Canada.
- 2017–2020, *Water and sediment yield response to climate change*.
Project participant, sponsored by Outstanding Youth Science Foundation, National Natural Science

Foundation of China.

- 2016–2017, *Evolution and mechanism of runoff in Three River basin under climate change*.

Project participant, sponsored by National Natural Science Foundation of China.

- 2015–2016, *Soil erosion characteristics and water sediment process in typical loess plateau under climate change*.

Project participant, sponsored by the National Natural Science Foundation of China.

CONFERENCE EXPERIENCE:

- Oral, “Preliminary analysis of future climate changes in Nechako River Basin, BC”, the 10th Annual Research Meeting of the UNBC, March 03 - March 08, 2022, UNBC, Prince George, Canada.
- Oral, “Meteorological and hydrological drought on the Loess Plateau, China: Evolutionary characteristics, impact, and propagation”, the 15th Annual Meeting of the Asia Oceania Geosciences Society (AOGS), June 03 - June 08, 2018, Honolulu, Hawaii, USA.
- Poster, “Modeling streamflow and sediment responses to climate change and human activities in the Yanhe River, China”, the 13th Annual Meeting of the Asia Oceania Geosciences Society (AOGS), July 31 - August 05, 2016, Beijing, China.
- Poster, “Detecting the quantitative hydrological response to changes in climate and human activities”, AGU Fall Meeting, December 12-16, 2016, San Francisco, California,

ACADEMIC ACTIVITY:

Editorial board of *Frontiers in Water*, and reviewers for *Journal of Hydrology*, *Advances in Water Resources* and *Science of the Total Environment* etc.