Curriculum Vitae

Lei Yan

PERSONAL DETAILS

Mobile Phone: +86-17831003218

E-mail: yanl@whu.edu.cn

Date of Birth October 4th, 1990

EDUCATION

2015-2018 **Ph.D.**, **Hydrology and Water Resources**, *Wuhan University*, Wuhan, China
Department of Hydrology and Water Resources
Project: *Nonstationary Flood Frequency Analysis*

2013-2015 **M.S.**, **Hydraulic Engineering**, *Wuhan University*, Wuhan, China
Department of Hydrology and Water Resources
Project: *Analysis of Impacts of Climate Change on Rainfall Extremes*

2009-2013 **B.S.**, **Hydraulic and Hydropower Engineering**, *China Agriculture University*, Beijing, China
Department of Hydraulic and Hydropower Engineering

RESEARCH INTERESTS

Water management, urban waterlogging, hydrometeorology, precipitation

EMPLOYMENT

2018-Present **Associate Professor,** Department of Hydrology and Water Resources, Hebei University of Engineering, Handan, Hebei, China
During this period, I was mainly involved in research projects related to water management and impacts of climate change on precipitation

PUBLICATIONS

[1] **Yan, L.**, Xiong, L., Jiang, C., Zhang, M., Wang, D., Xu, C.-Y. Updating intensity–duration–frequency curves for urban infrastructure design under a changing environment. *WIREs Water*, **2021**, e1519. https://doi.org/10.1002/wat2.1519

[2] **Yan, L.**, Xiong, L., Ruan, G., Zhang, M., Xu, C.-Y. Design flood estimation with varying record lengths in Norway under stationarity and nonstationarity scenarios. *Hydrology Research*, **2021**, nh2021026. https://doi.org/10.2166/nh.2021.026

[3] Jiang, C., Xiong, L., Xu, C.-Y., **Yan, L**. A river network-based hierarchical model for deriving flood frequency distributions and its application to the Upper Yangtze basin. *Water Resources Research*, **2021**, 57, e2020WR029374. https://doi.org/10.1029/2020WR029374

[4] **Yan, L.**, Xiong, L., Luan, Q., Jiang, C., Yu, K., Xu, C.-Y. On the applicability of the expected waiting time method in nonstationary flood design. *Water Resources Management*, **2020**, 34: 2585-2601

[5] Qu, C., Li J., **Yan, L.**, Yan, P., Cheng, F., Lu, D. Non-stationary flood frequency analysis using cubic B-spline-based GAMLSS model. *Water*, **2020**, 12(7): 1867

[6] **Yan, L.**, Xiong, L., Ruan, G., Xu, C.-Y., Yan, P., Liu, P. Reducing Uncertainty of Design Floods of Two-Component Mixture Distributions by Utilizing Flood Timescale to Classify Flood Types in Seasonally Snow Covered Region. *Journal of Hydrology*, **2019**, 574: 588-608.

[7] **Yan, L.**, Li, L., Yan, P., He, H., Li, J., Lu, D. Nonstationary flood hazard analysis in response to climate change and population growth. *Water*, **2019**, 11: 1811.

[8] **Yan, L.**, Xiong, L., Guo, S., Xu, C.-Y., Xia, J., Du, T. Comparison of four nonstationary hydrologic design methods for changing environment. *Journal of Hydrology*, **2017**, 551: 132-150.

[9] **Yan, L.**, Xiong, L., Liu, D., Hu, T., Xu, C.-Y. Frequency analysis of nonstationary annual maximum flood series using the time-varying two-component mixture distribution. *Hydrological Processes*, **2017**, 31(1): 69-89.

[10] Xiong, L., **Yan, L.**, Du, T., Yan, P., Li, L., Xu, W. Impacts of climate change on urban extreme rainfall and drainage infrastructure performance: a case study in Wuhan City, China. *Irrigation and Drainage*, **2019**, 68(2): 152-164.

[11] Jiang, C., Xiong, L., **Yan, L.**, Dong, J., Xu, C.-Y. Multivariate hydrologic design methods under nonstationary conditions and application to engineering practice. *Hydrology and Earth System Sciences*, **2019**, 23, 1683-1704.

[12] Xu, W., Jiang, C., **Yan, L.**, Li, L., Liu, S. An adaptive Metropolis-Hastings optimization algorithm of Bayesian estimation in non-stationary flood frequency analysis. *Water Resources Management*, **2018**, 32(4): 1343–1366.

[13] Kuang, Y., Xiong, L., Yu, K., Liu, P., Xu, C.-Y., **Yan, L.** Comparison of the first-order and second-order derived moments approaches in estimating the annual runoff distribution. *Journal of Hydrologic Engineering*, **2018**, 23(8): 04018034.

[14] Li, L., Krasovskaia, I., Xiong, L., **Yan, L.** Analysis and projection of runoff variation in three Chinese rivers. *Hydrology Research*, **2017**, 48(5): 1296-1310.

PROFESSIONAL ACTIVITIES, AFFILIATIONS & SERVICES

Journal reviewer

Journal of Hydrology, Water Resources Management, Science of the Total Environment, Journal of Environmental Informatics

Society membership

American Geophysical Union: 2016-2017

SELECTED HONOR & AWARDS

2018 **Guangwen Liu Scholarship for Graduate Students**, Hohai University

2018 **Excellent model of Graduate Students**, School of Water Resources and Hydropower Engineering

2017 **National Scholarship for Graduate Students**, Ministry of Education of P.R. China

2014 **First Place Excellent Graduate Scholarship**, Wuhan University

2013 **Excellent Graduates**, China Agriculture University