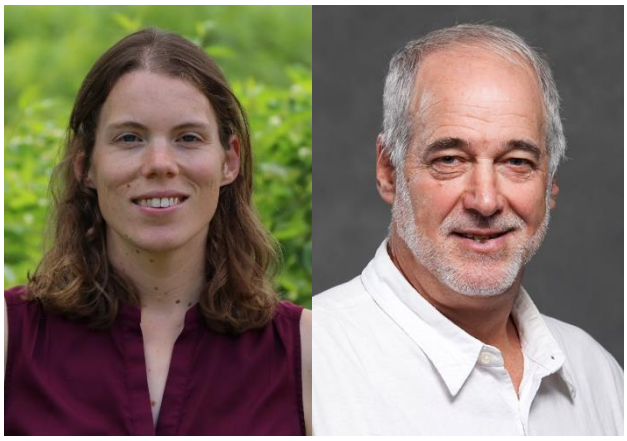
Results of the STAHY Best Paper Award 2019

The STAHY Best Paper Award 2019 is assigned to:

- *Laura K. Read,* National Center for Atmospheric Research, Boulder, Colorado, USA
- *Richard M. Vogel*, Department of Civil and Environmental Engineering, Tufts University, Medford, Massachusetts, USA



Laura K. Read *Richard M. Vogel*

for the paper:

Read, L.K., and Vogel, R.M. (2015). Reliability, return periods, and risk under nonstationarity. Water Resources Research 51.8: 6381-6398, doi: 10.1002/2015WR017089.

The STAHY Best Paper Award 2019 will be assigned during the STAHY'19 Conference - Nanjing, 19-20 October 2019.

The STAHY Best Paper 2019 is the result of evaluation of the following 20 papers, proposed by the ICSH Officers and published in 2015-2016-2017, ordered by citations (SCOPUS database, excluding self-citations):

1. Taormina, R. and Chau K.W. (2015). Data-driven input variable selection for rainfall-runoff modeling using binary-coded particle swarm optimization and Extreme Learning Machines. Journal of Hydrology, 529, 1617-1632 (cited 152 times)
2. Cook, B.I., Anchukaitis, K.J., Touchan, R., Meko, D.M., and Cook, E.R. (2016), Spatiotemporal drought variability in the Mediterranean over the last 900 years. Journal of Geophysical Research Atmosphere, 121, 2060– 2074 (cited 111 times)
3. Serinaldi, F. and Kilsby, C.G. (2015). Stationarity is undead: Uncertainty dominates the distribution of extremes, Advances in Water Resources, 77, 17-36 (cited 108 time)
4. Alfieri, L., Burek, P., Feyen, L. and Forzieri, G. (2015). Global warming increases the frequency of river floods in Europe, Hydrology and Earth System Sciences 19, 2247-2260 (cited 106 times)
5. Read, L.K. and Vogel, R.M. (2015). Reliability, return periods, and risk under nonstationarity, Water Resources Research, 51, 8, 6381-6398 (independently proposed by 3 Officers; cited 58 times)
6. Rajsekhar, D., Singh, V.P. and Mishra, A.K. (2015). Multivariate drought index: An information theory based approach for integrated drought assessment. Journal of Hydrology, 526, 164-18 (cited 57 times)
7. Van Loon, A.F., Stahl, K., Di Baldassarre, G., Clark, J., Rangecroft, S., Wanders, N., Gleeson, T., Van Dijk, A.I.J.M., Tallaksen, L.M., Hannaford, J., Uijlenhoet, R., Teuling, A.J., Hannah, D.M.,

Sheffield, J., Svoboda, M., Verbeiren, B., Wagener, T., and Van Lanen, H.A.J. (2016). Drought in a human-modified world: reframing drought definitions, understanding, and analysis approaches, Hydrology and Earth System Sciences, 20, 3631-3650 (cited 49 times)

8. Coxon, G., Freer, J., Westerberg, I. K., Wagener, T., Woods, R., and Smith, P. J. (2015). A novel framework for discharge uncertainty quantification applied to 500 UK gauging stations. Water Resources Research, 51(7), 5531-5546 (cited 45 times)
9. Falter, D., Schröter, K., Dung, N.V., Vorogushyn, S., Kreibich, H., Hundecha, Y., Apel, H. and Merz, B. (2015). Spatially coherent flood risk assessment based on long-term continuous simulation with a coupled model chain, Journal of Hydrology, 524, 182-193 (independently proposed by 2 Officers; cited 38 times)
10. Prosdocimi, I., Kjeldsen, T. R., and Miller, J. D. (2015). Detection and attribution of urbanization effect on flood extremes using nonstationary flood-frequency models. Water Resources Research, 51(6), 4244-4262 (cited 37 times)
11. Du, T., Xiong, L., Xu, C.-Y., Gippel, C.J., Guo, S., Liu, P. (2015). Return period and risk analysis of nonstationary low-flow series under climate change, Journal of Hydrology, 527, 234-250 (cited 36 times)
12. Zhang, Q., Gu, X., Singh, V. P., Xiao, M., and Chen, X. (2015). Evaluation of flood frequency under non-stationarity resulting from climate indices and reservoir indices in the East River basin, China. Journal of Hydrology, 527, 565-575 (cited 34 times)
13. Vormoor, K., Lawrence, D., Heistermann, M. and Bronstert, A. (2015). Climate change impacts on the seasonality and generation processes of floods—projections and uncertainties for catchments with mixed snowmelt/rainfall regimes. Hydrology and Earth System Sciences, 19, 913–931 (cited 30 times)
14. Machado, M. J., Botero, B. A., López, J., Francés, F., Díez-Herrero, A., and Benito, G. (2015). Flood frequency analysis of historical flood data under stationary and non-stationary modelling. Hydrology and Earth System Sciences, 19(6), 2561 (cited 29 times)
15. Zhao T., Bennett, J.C., Wang, Q.J., Schepen, A., Wood, A.W., Robertson, D.E. and Ramos, M.-H. (2017). How Suitable is Quantile Mapping For Postprocessing GCM Precipitation Forecasts? Journal of Climate, 30, 3185-319 (independently proposed by 2 Officers; cited 23 times)
16. Halbert, K., Nguyen, C.C., Payrastre, O. and Gaume, E. (2016). Reducing uncertainty in flood frequency analyses: A comparison of local and regional approaches involving information on extreme historical floods, Journal of Hydrology, Volume 541, 90-98 (independently proposed by 2 Officers; cited 20 times)
17. Caillouet, L., Vidal, J.-P., Sauquet, E. and Graff, B. (2016). Probabilistic precipitation and temperature downscaling of the Twentieth Century Reanalysis over France, Climate of the Past, 12(3), 635-662 (cited 13 times)
18. Hu Y.-M., Liang Z., Liu Y., Wang J., Yao L., Ning Y. (2015). Uncertainty analysis of SPI calculation and drought assessment based on the application of Bootstrap. International Journal of Climatology, 35, 1847-1857 (cited 13 times)
19. Hu, Y. M., Liang, Z. M., Liu, Y. W., Zeng, X. F., and Wang, D. (2015). Uncertainty assessment of estimation of hydrological design values. Stochastic Environmental Research and Risk Assessment, 29, 501-511 (cited 8 times)
20. Liu, D., Wang, D., Wang, Y., Wu, J., Singh, V. P., Zeng, X., ... & Gu, S. (2016). Entropy of hydrological systems under small samples: Uncertainty and variability. Journal of Hydrology, 532, 163-176 (cited 5 times)