

REFERENCES

- Archfield, S. A. and Vogel, R. M. (2010) 'Map correlation method: Selection of a reference stream gage to estimate daily streamflow at ungauged catchments', *Water Resources Research*, 46(10), pp. 1–15. doi: 10.1029/2009WR008481.
- Besaw, L. E. et al. (2010) 'Advances in ungauged streamflow prediction using artificial neural networks', *Journal of Hydrology*. Elsevier B.V., 386(1–4), pp. 27–37. doi: 10.1016/j.jhydrol.2010.02.037.
- Blöschl, G., & Sivapalan, M. (1995). Scale issues in hydrological modelling: a review. *Hydrological processes*, 9(3-4), 251-290.
- Bureau of Meteorology. Good practice Guidelines for Water Data Management Policy (2017).
- Byeon, S. J. (2015) 'Water balance assessment for stable water management in island region Docteur en Sciences Water Balance Assessment for Stable Water Management'.
- Caldera, H. P. G. M., Piyathisse, V. R. P. C., & Nandalal, K. D. W. (2016). A Comparison of Methods of Estimating Missing Daily Rainfall Data. *Engineer: Journal of the Institution of Engineers, Sri Lanka*, 49(4).
- Carpenter, T. M., and Georgakakos, K. P. (2006) 'Inter-comparison of lumped versus distributed hydrologic model ensemble simulations on operational forecast scales', *Journal of Hydrology*, 329(1–2), pp. 174–185. doi: 10.1016/j.jhydrol.2006.02.013.
- Chang, W., & Chen, X. (2018). Monthly Rainfall-Runoff Modeling at Watershed Scale: A Comparative Study of Data-Driven and Theory-Driven Approaches. *Water*, 10(9), 1116.
- Cheng, Q. et al. (2006) 'GIS modeling for predicting river runoff volume in ungauged drainages in the Greater Toronto Area, Canada', *i*, pp. 1108–1119. doi: 10.1016/j.cageo.2006.02.005.

- Cheng, Y., He, H., Cheng, N., & He, W. (2016). The Effects of Climate and Anthropogenic Activity on Hydrologic Features in Yanhe River. *Advances in Meteorology*, 2016, 1–11. <https://doi.org/10.1155/2016/5297158>.
- Farmer, W. H., and Vogel, R. M. (2013) ‘Performance-weighted methods for estimating monthly streamflow at ungauged sites’, *Journal of Hydrology*. Elsevier B.V., 477, pp. 240–250. doi: 10.1016/j.jhydrol.2012.11.032.
- Gan, T. Y., Dlamini, E. M., & Biftu, G. F. (1997). Effects of model complexity and structure, data quality, and objective functions on hydrologic modeling. *Journal of Hydrology*, 192(1–4), 81–103. [https://doi.org/10.1016/S0022-1694\(96\)03114-9](https://doi.org/10.1016/S0022-1694(96)03114-9).
- Gao, P., Li, P., Zhao, B., Xu, R., Zhao, G., Sun, W., & Mu, X. (2017). Use of double mass curves in hydrologic benefit evaluations. *Hydrological Processes*, 31(26), 4639–4646. <https://doi.org/10.1002/hyp.11377>.
- Gleick, P. H. (1987). The development and testing of a water balance model for climate impact assessment: modeling the Sacramento basin. *Water Resources Research*, 23(6), 1049-1061.
- Gu, C., Mu, X., Gao, P., Zhao, G., & Sun, W. (2019). Changes in run-off and sediment load in the three parts of the Yellow River basin, in response to climate change and human activities. *Hydrological Processes*, 33(4), 585–601. <https://doi.org/10.1002/hyp.13345>.
- Gupta, H. V., Sorooshian, S., & Yapo, P. (1996). Automatic calibration of conceptual rainfall-runoff sensitivity to calibration data models: *Journal of Hydrology*, 181, 23–48.
- Gupta, V. K., & Sorooshian, S. (1985). The relationship between data and the precision of parameter estimates of hydrologic models. *Journal of Hydrology*, 81(1-2), 57-77.

- Haan, C. T. (1972). A water yield model for small watersheds. *Water Resources Research*, 8(I), 58–69.
- Harlin, J. (1991) Development of a process-oriented calibration scheme for the HBV hydrological model. *Nordic Hydrol.* 22(1), 15–36.
- Hughes, D. A. (2004). Incorporating groundwater recharge and discharge functions into an existing monthly rainfall-runoff model. *Hydrological Sciences-Journal*, 49(2), 297–312. doi.org/10.1623/hysj.49.2.297.34834
- James, W. (2005). *Rules for Responsible Modeling-4th Edition*, http://chiwater.com/Files/R184_CHI_Rules.pdf
- Jarboe, J. E., and Haan, C. T. (1974) ‘Calibrating a water yield model for small ungauged watersheds’, *Water Resources Research*, 10(2), pp. 256–262. doi: 10.1029/WR010i002p00256.
- Keshtegar, B., Allawi, M. F., Afan, H. A., & El-Shafie, A. (2016). Optimized River Stream-Flow Forecasting Model Utilizing High-Order Response Surface Method. *Water resources management*, 30(11), 3899-3914.
- Klemeš, V. (1986). Operational testing of hydrological simulation models. *Hydrological Sciences Journal*, 31:1, 13–24. <https://doi.org/10.1080/02626668609491024>
- Kokkonen, T. S. et al. (2003) ‘Predicting daily flows in ungauged catchments: Model regionalization from catchment descriptors at the Coweeta Hydrologic Laboratory, North Carolina’, *Hydrological Processes*, 17(11), pp. 2219–2238. doi: 10.1002/hyp.1329.
- Li, C. Z., Wang, H., Liu, J., Yan, D. H., Yu, F. L., & Zhang, L. (2010). Effect of calibration data series length on performance and optimal parameters of the hydrological model. *Water Science and Engineering*, 3(4), 378-393.

- Loucks D.P., van Beek E. (2017) System Sensitivity, and Uncertainty Analysis. In: Water Resource Systems Planning and Management. Springer, Cham.
- Lü, H., Hou, T., Horton, R., Zhu, Y., Chen, X., Jia, Y., Fu, X. (2013). The streamflow estimation using the Xinan Jiang rainfall-runoff model and dual state-parameter estimation method. *Journal of Hydrology*, 480, 102–114. <https://doi.org/10.1016/j.jhydrol.2012.12.011>
- Makhlouf, Z., & Michel, C. (1994). A two-parameter monthly water balance model for French watersheds. *Journal of Hydrology*, 162(3-4), 299-318
- Martin-Carrasco, F., Garrote, L., Iglesias, A., & Mediero, L. (2013). Diagnosing Causes of Water Scarcity in Complex Water Resources Systems and Identifying Risk Management Actions. *Water Resources Management*, 27(6), 1693–1705. <https://doi.org/10.1007/s11269-012-0081-6>.
- Michaud, J., & Sorooshian, S. (1994). Comparison of simple versus complex distributed runoff models on a midsized semiarid watershed. *Water resources research*, 30(3), 593-605.
- Mohseni, O., & Stefan, H. G. (1998). A monthly streamflow model. *Water Resources Research*, 34(5), 1287-1298.
- Murshed, S. B., & Kaluarachchi, J. J. (2018). Scarcity of freshwater resources in the Ganges Delta of Bangladesh. *Water Security*, 4–5(November), 8–18. <https://doi.org/10.1016/j.wasec.2018.11.002>.
- Mohamoud, Y. M. (2008) ‘Prediction of daily flow duration curves and streamflow for ungauged catchments using regional flow duration curves’, *Hydrological Sciences Journal*, 53(4), pp. 706–724. doi: 10.1623/hysj.53.4.706.
- Mohamoud, Y. M. and Parmar, R. S. (2006) ‘Estimating streamflow and associated hydraulic geometry, the Mid-Atlantic Region, USA’,

Journal of the American Water Resources Association, 42(3), pp. 755–768. doi: 10.1111/j.1752-1688.2006.tb04490.x.

- Nash, J. E., & Sutcliffe, J. V. (1970). River flow forecasting through conceptual models part i - a disclission of principles. 156, Journal of Hydrology, 10(3), 282–290. [https://doi.org/10.1016/0022-1694\(70\)90255-6](https://doi.org/10.1016/0022-1694(70)90255-6)
- Negash, W. (2014). Catchment dynamics and its impact on runoff generation: Coupling watershed modelling and statistical analysis to detect catchment responses. <https://doi.org/10.5897/ijwree2013.0449>
- Oudin, L. et al. (2008) ‘Spatial proximity, physical similarity, regression and ungauged catchments: A comparison of regionalization approaches based on 913 French catchments’, Water Resources Research, 44(3), pp. 1–15. doi: 10.1029/2007WR006240.
- Palmer, W.C., 1965. Meteorologic drought. Res. Pap. U.S. Weather Bur, 45, 58 pp.
- Patil, S. D. and Stieglitz, M. (2015) ‘Comparing spatial and temporal transferability of hydrological model parameters’, Journal of Hydrology. Elsevier, doi:10.1016/j.jhydrol.2015.04.003.
- Patil, S. and Stieglitz, M. (2012) ‘Controls on hydrologic similarity: Role of nearby gauged catchments for prediction at an ungauged catchment’, Hydrology and Earth System Sciences, 16(2), pp. 551–562. doi: 10.5194/hess-16-551-2012.
- Patil, S. and Stieglitz, M. (2014) ‘Modelling daily streamflow at ungauged catchments: What information is necessary’, Hydrological Processes, 28(3), pp. 1159–1169. doi: 10.1002/hyp.9660.
- Perrin, C., Oudin, L., Andreassian, V., Rojas-Serna, C., Michel, C., & Mathevet, T. (2007). Impact of limited streamflow data on the

- efficiency and the parameters of rainfall—runoff models. *Hydrological sciences journal*, 52(1), 131-151.
- Perrin, C., Oudin, L., Andreassian, V., Rojas-Serna, C., Michel, C., & Mathevet, T. (2007). Impact of limited streamflow data on the efficiency and the parameters of rainfall-runoff models. *Hydrological Sciences Journal*, 52(1), 131–151. <https://doi.org/10.1623/hysj.52.1.131>
- Porkka, M., Gerten, D., Schaphoff, S., Siebert, S., & Kummu, M. (2016). Causes and trends of water scarcity in food production. *Environmental Research Letters*, 11(1), 15001. <https://doi.org/10.1088/1748-9326/11/1/015001>
- Qi, Z., Kang, G., Chu, C., Qiu, Y., Xu, Z., & Wang, Y. (2017). Comparison of SWAT and GWLF model simulation performance in humid south and semi-arid north of China. *Water (Switzerland)*, 9(8). <https://doi.org/10.3390/w9080567>
- Searcy, J. K., & Hardison, C. H. (1960). *Double-Mass Curves, Manual of Hydrology: part1. General Surface Water Techniques*, U.S. Geological Survey, Water-Supply Paper 1541-B. United States Government Printing Office, Washington, 66. <http://udspace.udel.edu/handle/19716/1592>
- Sorooshian, S., Gupta, V. K., & Fulton, J. L. (1983). Evaluation of Maximum Likelihood Parameter Estimation Techniques for and Length on Model Credibility. *Water Resources Research*, 19(1), 251–259. <https://doi.org/10.1029/WR019i001p00251>
- Thomas, H. A., *Improved methods for National Water Assessment*, report, contract WR15249270, U.S. Water Resour. Council., Washington, D.C., 1981
- Thornthwaite, C. W., and J. R. Mather, *The water balance*, Publ. Climatol. Lab. Climatol. Drexel Inst. Technol., 8(1), 1-104, 1955.

- Vandewiele, G. L., & Elias, A. (1995). Monthly water balance of ungauged catchments obtained by geographical regionalization. *Journal of hydrology*, 170(1-4), 277-291.
- Vandewiele, G. L., Xu, C. Y., & Ni-Lar-Win. (1992). Methodology and comparative study of monthly water balance models in Belgium, China and Burma. *Journal of Hydrology*, 134(1-4), 315-347. [https://doi.org/10.1016/0022-1694\(92\)90041-S](https://doi.org/10.1016/0022-1694(92)90041-S)
- Wagner, T., Boyle, D. P., Lees, M. J., Wheat, H. S., Gupta, H. V., & Sorooshian, S. (2001). A framework for development and application of hydrological models. *Hydrology and Earth System Sciences*, 5(1), 13-26.
- Shu, C. and Ouarda, T. B. M. J. (2012) 'Improved methods for daily streamflow estimates at ungauged sites', 48(January), pp. 1-15. doi: 10.1029/2011WR011501.
- Smith, M. B. et al. (2012) 'The distributed model inter comparison project - Phase 2: Motivation and design of the Oklahoma experiments', *Journal of Hydrology*, 418-419, pp. 3-16. doi: 10.1016/j.jhydrol.2011.08.055.
- Wijesekera, N. T. S. (2000). Parameter Estimation in Watershed Model: A Case Study Using Gin Ganga Watershed. *The Institution of Engineers, Sri Lanka*, 1-Part B, 26-32.
- Wijesekera, N. T. S. (2018). Classification of Streamflow Observations for Watermanagement,(February).<https://doi.org/10.13140/RG.2.2.23605.58089>
- Wijesekera, N. T. S., & Musiaka, K. (1990a). Streamflow Modelling of a Sri Lankan Catchment Considering Spatial Variation of Rainfall. In *Proceedings of the 45th Annual Conference of the Association of Civil Engineers Japan*

- Wijesekera, N. T. S., & Musiaka, K. (1990b). Streamflow Modelling of Sri Lankan Catchments (2) - Kalu River Catchment at Putupaula. *Seisan Kenkyu*, 42(11), 645–648.
- Wijesekera, N. T. S., & Musiaka, K. (1990c). Streamflow Modelling of Sri Lankan Catchments (1) - Mahaweli River Catchment at Peradeniya. *Seisan Kenkyu*, 42(11), 645–648.
- World Meteorological Organization. (1965). WMO No. 168 - Guide to Hydrometeorological Practices. WMO No. 168. Geneva: World Meteorological Organization (WMO).
- Wijesekera, T. (2010) Surface Water Resources and Climate Change HydroGIS Tool Structure : Model for Smartphone and Community-GIS based weather prediction View project Climate change View project Surface Water Resources and Climate Change. Available at: <https://www.researchgate.net/publication/313439012>.
- Xiong, L., & Guo, S. (1999). A two-parameter monthly water balance model and its application. *Journal of Hydrology*, 216(1–2), 111–123. [https://doi.org/10.1016/S0022-1694\(98\)00297-2](https://doi.org/10.1016/S0022-1694(98)00297-2)
- Xu, C. Y. (1999) ‘Estimation of parameters of a conceptual water balance model for ungauged catchments’, *Water Resources Management*, 13(5), pp. 353–368. doi: 10.1023/A:1008191517801.
- Xu, C. Y., Seibert, J. and Halldin, S. (1996) ‘Regional water balance modelling in the NOPEX area: Development and application of monthly water balance models’, *Journal of Hydrology*, 180(1–4), pp. 211–236. doi: 10.1016/0022-1694(95)02888-9.
- Xu, C. Y. and Singh, V. P. (1998) ‘A Review on Monthly Water Balance Models for Water Resources Investigations’, *Water Resources Management*, 12(1), pp. 31–50. doi: 10.1023/A:1007916816469.

- Yang, X., Sun, W., Li, P., Mu, X., Gao, P., & Zhao, G. (2019). Integrating agricultural land, water yield and soil conservation trade-offs into spatial land use planning. *Ecological Indicators*, 104.
- Yang, X., Sun, W., Li, P., Mu, X., Gao, P., & Zhao, G. (2018). Reduced sediment transport in the Chinese Loess Plateau due to climate change and human activities. *Science of the Total Environment*, 642, 591–600. <https://doi.org/10.1016/j.scitotenv.2018.06.061>
- Yapo, P. O., Gupta, H. V., & Sorooshian, S. (1996). Automatic calibration of conceptual rainfall runoff models: sensitivity to calibration data. *Journal of Hydrology*, 181(1-4), 23-48.
- Zhang, Y. and Chiew, F. H. S. (2009) ‘Relative merits of different methods for runoff predictions in ungauged catchments’, 45(February). doi: 10.1029/2008WR007504.
- Zhao, G., Mu, X., Jiao, J., Gao, P., Sun, W., Li, E., Huang, J. (2018). Assessing response of sediment load variation to climate change and human activities with six different approaches. *Science of the Total Environment*, 639, 773–784. <https://doi.org/10.1016/j.scitotenv.2018.05.154>