

REFERENCES

- Abbaspour, K. (2004). Calibration of Hydrologic Models: When is a Model Calibrated?
- André , M., Benoît , H., & Cécile , P. (2015). *Hydrology A Science for Engineers.* 6000 Broken Sound Parkway NW, Suite 300: CRC Press Taylor & Francis Group.
- Asati, S., & Rathore, S. (2012). Comparative Study of Stream Flow Prediction Models.
- Aubert, D., Loumagne, C., & Oudin, L. (2003). Sequential assimilation of soil moisture and streamflow data in a conceptual rainfall -Runoff model. *Journal of Hydrol.*, 280, 145–161.
- Berthet, L., Andréassian, V., Perrin, C., & Javelle, P. (2011). How crucial is it to account for the antecedent moisture conditions in flood forecasting? Comparison of event-based and continuous approaches on 178 catchments. *Hydrol. Earth Syst. Sci.*, 13, 819–831.
- Burt, T., & Weerasinghe, K. (2014). Rainfall Distributions in Sri Lanka in Time and Space. *An Analysis Based on Daily Rainfall Data. Climate*, 2(4), 242-263.
- Caldera, H., Piyathisse, V., & Nandalal, K. (2016). A Comparison of Methods of Estimating Missing Daily Rainfall Data. *ENGINEER - Vol. XLIX, No. 04*, 1-8.
- Campozano, L., Sanchez, E., Aviles, A., & Samaniego, E. (2014). Evaluation of infilling methods for time series of daily precipitation and temperature: The case of the Ecuadorian Andes.
- Castillo, V., Gomez-Plaza, A., & Martinez-Mena, M. (2003). The role of antecedent soil water content in the runoff response of semiarid catchments: a simulation approach. *Journal of Hydrol.* 284 (1), 114–130.
- Chow, V., Maidment, D., & Mays, L. (1988). *Applied Hydrology*. McGraw Hill.
- Cooray, P. (1984). *An Introduction to the Geology of Sri Lanka (Ceylon)*,2nd revised edition. Colombo.
- Daggupati, P., Haw, Y., Michael, J. W., Raghavan, S., Jaffrey, G. A., Conor, S. K., & Scott , P. S. (2015). Impact of Model Development,Calibration and Validation decisions on Hydrological Simulation in West Lake Erie Basin.
- Daggupati, P., Pai, N., Ale, S., Douglas, Zeckoski, K., Jeong, J., . . . Youssef, M. (2014). A Recommended Calibration and Validation Strategy for Hydrologic and Water Quality models. *American Society of Agricultural and Biological Engineers, Vol. 58(6)*, 1705-1719.

- De Silva, M., Weerakoon, S., & Shrikantha, H. (2014). *Journal of Hydrology*.
- De Silva, M., Weerakoon, S., Srikantha, H., & Ratnayake, U. (2012). Event Based Flood Modeling in Lower Kelani Basin. *SAITM Research Symposium on Engineering Advancements*.
- De Silva, M., Weerakoon, S., Srikantha, H., Ratnayake, U., & Mahanama, S. (2012). *Flood Inundation Mapping along the Lower Reach of Kelani River Basin under the Impact of Climatic Change*.
- Dharmasena, G. T. (1997). *Application of mathematical models for flood forecasting in Sri Lanka*. Colombo: Hydrology Division, Irrigation Department of Sri Lanka.
- Duhan, S., & Kumar, M. (2017). Event and Continuous Hydrological Modeling with HEC-HMS. *International Journal of Engineering Technology Science and Research* 4, 2394–3386.
- Gamagea, S., Hewaa, G., & Beechama, S. (2015). Modelling hydrological losses for varying rainfall and moisture conditions in South Australian catchments. *Journal of Hydrology*, 4, 1-21.
- Gayathri, K., Ganassi, B., & Dwarakish, G. (2015). *A Review on Hydrological Models*.
- Georgakakos, K. P. (2006). Analytical results for operational flash flood guidance. *Journal of Hydrol.* 317, 81–103.
- Getachew, T., Dong, K. P., & Young-Oh, K. (2017). Comparison of hydrological models for the assessment of water resources in a data-scarce region, the Upper Blue Nile River Basin. *Journal of Hydrology*, 14, 49-66.
- Hay, L., & Clark, M. (2003). Use of statistically and dynamically downscaled atmospheric model output for hydrologic simulations in three mountainous basins in the western United States. *Journal of Hydrology*, 282, 56–75.
- Hlavcova, H., Kohnova, S., Kubes, R., Szolgay, J., & Zvolensky, M. (2005). An empirical method for estimating future flood risks for flood warnings. *Hydrol. Earth Syst. Sci.*, 9, 431–448.
- Hosseini, M., Samani, & Shamasipour, G. (2004). Hydrologic flood routing in branched river systems via nonlinear optimization. *Journal of Hydraulic Research*, 42, 55-59.
- HRS-Report-No-06. (1999). *Rainfall Antecedent to Large and Extreme Rainfall Bursts Over Southeast Australia*. Bureau of Meteorology, Australia.
- Hunukumbura, P., Weerakoon, S., & Herath, S. (2004a). Estimation of Flow Duration Curves for Mini Hydropower Plant Design in Ungauged Streams using Measurements during a Short Period. *Proceedings of the International*

Conference on Sustainable Water Resources Management in the Changing Environment of the Monsoon Region. Colombo: National Water Resources Secretariat.

- IFM-Tool Series-No.19. (2013). *Integrated Flood Management ,Flood Forecasting and Early Warning.* World Meteorological Organization.
- Jonathan, J., Gourley, & Robert, A. C. (2018). Real-Time Flash Flood Forecasting. *Oxford Research Encyclopedia of Natural Hazard Science.*
- Kachroo, R., & Liang, G. (1992). River flow forecasting: Algebraic development of linearmodelling techniques. *Journal of Hydrology*, 133(1-2), 17-40.
- Keith Beven. (2012). *Rainfall-Runoff Modelling.* Chichester, West Sussex, PO19 8SQ, UK: John Wiley & Sons, Ltd.
- Kopmann, R., & Schmidt, A. (2010). *Comparison of different reliability analysis methods for a 2D morphodynamic numerical model of River Danube.*
- Krishan P. Singh. (1982). *Runoff Conditions for Converting Strom Rainfall to Runoff with SCS Curve Numbers.* SWS Contract Report.
- Lijalem, Z., Jackson, R., & Dilnesaw, A. (2007). Calibration and validation of SWAT Hydrologic Model for Meki Watershed Ethiopia.
- Mallawatantri, A., Rodrigo, A., & De Silva, K. (2016). *Medium to Long-term Multi-Stakeholder Strategy and Action Plan for Management and Conservation of Kelani River Basin.* Colombo: Central Environment Authority and International Union for the Conservation of Nature.
- Matthew, C., & Myles, R. A. (2002). Assessing the Relative Roles of Initial and Boundary Conditions in Inter annual to Decadal Climate Predictability.
- Mishra, S., Jain, M., & Singh, V. (2004). Evaluation of the SCSCN-based model incorporating antecedent moisture. *Water Resour.Manag.* 18 (6), 567–589.
- Mohsen, S., & Mehdi, D. (2012). Comparison of Flood Routing Models (Case Study: Maroon River, Iran). *World Applied Sciences Journal* 16 (5), 769-775.
- Montesarchio, V., Lombardo, F., & Napolitano, F. (2009). Rainfall thresholds and flood warning: an operative case study. *Hazards Earth Syst. Sci.*, 9, 135–144.
- Moriasi, D., Arnold, J., Van Liew, M., Bingner, R., Harmel, R., & Veith, T. (2007). *Model evaluation guidline for systematic quantification of accuracy in watershed simulations.*
- Mu, J., & Zhang, X. (2007). Real-time flood forecasting method with 1-D unsteady flow model. *Journal of Hydrodynamics*, 19(2), 150-154.
- Nandakumar, N., Mein, R., & Siriwardena, L. (1994). *Loss Modeling for Flood Estimation.* Cooperative Reserch Centerfor Catchment Hydrology.

- Nanseer, N., & Rajkumar, S. (2006). Kelani Ganga Conservation Barrage and Results of Model Studies. *ENGINEER - Vol. XXXIX, No. 02*, 42-49.
- Neal, J., Atkinson, P., & Hutton, C. (2007). Flood inundation model updating using an ensemble Kalman filter and spatially distributed measurements. *Journal of Hydrology*, 336(3-4), 401-415.
- Owe, M., De Jeu, R., & Walker, J. (2001). A methodology for surface soil moisture and vegetation optical depth retrieval using the microwave polarization difference index. *IEEE Trans. Geosci. Remote Sens.*, 39(8), 1643-1654.
- Panabokke, C. R. (1996). *Soils and Agro-Ecological Environments of Sri Lanka*. Colombo.
- Parasuraman, K., & Elshorbagy, A. (2008). *Toward improving the reliability of hydrologic prediction: Model structure uncertainty and its quantification using ensemble-based genetic programming framework*. Water Resources Research, 44.
- Parkin, G., O'Donnell, G., Ewen, J., Bathurst, J., O'Connell, P., & Lavabre, J. (1996). Validation of catchment models for predicting land-use and climate change impacts: 2. Case study for a Mediterranean catchment. *Journal of Hydrology*, 175, 595–613.
- Raghunath, H. M. (2006). *Hydrology (2nd ed.)*. New Delhi: New Age International (Pvt) Ltd.
- Sakazume, R., Masahiro, R., & Oliver, S. (2015). Consideration of Antecedent Soil Moisture for Predicting Flood Characteristics. *Journal of Japan Society of Civil Engineers*, 71, 97-102.
- Sampath, D., Weerakoon, S., & Herath, S. (2015). HEC-HMS Model for Runoff Simulation in a Tropical Catchment with Intra-Basin Diversions – Case Study of the Deduru Oya River Basin, Sri Lanka. *ENGINEER - Vol. XLVIII, No. 01*, 1-9.
- Sivapalan, M., Blöschl, G., Merz, R., & Gutknecht, D. (2005). Linking flood frequency to long-term water balance: Incorporating effects of seasonality. *Water Resour. Res.*, 41, 1-17.
- Thea, T., Korbinian, B., Janneke, E., Dinand, A., & Victor, J. (2016). A new flood type classification method for use in climate change impact studies. *Weather and Climate Extremes*, 14, 1-16.
- Tramblay, Y., Bouaicha, R., Brocca, L., Dorigo, W., Bouvier, C., Camici, S., & Servat, E. (2012). Estimation of antecedent wetness conditions for flood modelling in northern Morocco. *Hydrol. Earth Syst. Sci.*, 16, 4375–4386.

- USGS- TR No. W-10. (2007). *Improving Flood Forecasting and Early Warning in Somalia*. U.S. Geological Survey.
- Vaze, J., Jorden, P., Beecham, R., Forst, A., & Summerell, G. (2012). *Guidelines for rainfall-runoff modeling*. e Water Cooperative Research Center.
- Vel'azquez, J., Anctil, F., & Perrin, C. (2010). Performance and reliability of multimodel hydrological ensemble simulations based on seventeen lumped models and a thousand catchments. *Hydrol. Earth Syst. Sci.*, 14, 2303–2317.
- Vrugt, J., Gupta, H., Bouten, W., & Sorooshian, S. (2003). A shuffled complex evolution metropolis algorithm for optimization and uncertainty assessment of hydrologic model parameters. *Water Resour. Res.*, 39(8), 1201.
- Wijesekera , N., & Ghanapala, P. (2003). *Engineer Journal of the Institution of Engineers*.
- Wijesekera, N. (2000b). A Comparison of Peak Flow Estimates for Small Ungauged Urban Watersheds. *Annual Sessions of the Institution of Engineers Sri Lanka*.
- Wijesekera, N. (2010a). National Science Foundation,(Ministry of Irrigation and water resources management, Sri Lanka).
- Wilby, R. L. (2005). Uncertainty in water resource model parameters used for climate change impact assessment,. *Hydrol. Processes*, 19,, 3201-3219.
- William, A., Scharffenberg, & Matthew, J. (2009). *Hydrologic Modeling system HEC-HMS User's Manual US Army Crop Engineers*. 609,Second Street , Davis CA 95616 USA: Institute of water resources,Hydrologic Engineering Centre.
- WMO-168-Vol-I. (2008). *Guide to Hydrological Practices Volume I Hydrology – From Measurement to Hydrological Information*. World Meteorological Organization.
- WMO-168-Vol-II. (2009). *Guide to Hydrological Practices Volume II Management of Water Resources and Application of Hydrological Practices*. World Meteorological Organization .
- WMO-No.1095. (2012). *Technical Material for Water Resources Assessment*. World Meteorological Organization.
- WMO-No-100. (2011). *Guide to Climatological Practice*. World Meteorological Organization.
- WMO-No-1072. (2011). *Manual on Flood Forecasting and Warning*. World Meteorological Organization.
- World Disasters Report. (2003).

Yeou-Koung, T., & Chi-Leung, W. (2016). Sensitivity and Uncertainty Analysis of Hydrologic/Hydraulic Model for Shenzhen River and Northern New Territory Basin in Hong Kong.

Zakwan, M., & Muzzammil, M. (2016). Optimization approach for hydrologic channel Routing.