BIBLIOGRAPHY

Ali, M., Khan, S. J., Aslam, I., & Khan, Z. (2011). Simulation of the impacts of land-use change on surface runoff of Lai Nullah Basin in Islamabad, Pakistan. *Landscape and Urban Planning*, *102*(4), 271–279. https://doi.org/https://doi.org/10.1016/j.landurbplan.2011.05.006

Allen, R., Pereira, L., Raes, D., & Smith, M. (1998). Crop evapotranspiration, guidelines for computing crop water requirements. In *Irrigation and drain, Paper No. 56, FAO*.

Althoff, D., & Rodrigues, L. N. (2021). Goodness-of-fit criteria for hydrological models: Model calibration and performance assessment. *Journal of Hydrology*, *600*. https://doi.org/10.1016/j.jhydrol.2021.126674

Ampitiyawatta, A. D., & Guo, S. (2010). Precipitation trends in the Kalu Ganga basin in Sri Lanka. *Journal of Agricultural Sciences – Sri Lanka*, *4*(1), 10. https://doi.org/10.4038/JAS.V4I1.1641

Anderson, M. L., Z.-Q., C., Kavvas, M. L., & Arlen, F. (2002). Coupling HEC-HMS with Atmospheric Models for Prediction of Watershed Runoff. *Journal of Hydrologic Engineering*, *7*(4), 312–318. https://doi.org/10.1061/(ASCE)1084-0699(2002)7:4(312)

Azmat, M., Choi, M., Kim, T.-W., & Liaqat, U. W. (2016). Hydrological modeling to simulate streamflow under changing climate in a scarcely gauged cryosphere catchment. *Environmental Earth Sciences*, *75*(3), 186. https://doi.org/10.1007/s12665-015-5059-2

Azmat, M., Qamar, M. U., Ahmed, S., Hussain, E., & Umair, M. (2017). Application of HEC-HMS for the event and continuous simulation in high-altitude scarcely-gauged catchment under changing climate. In *European Water* (Vol. 57).

Bai, Y., Zhang, Z., & Zhao, W. (2019). Assessing the Impact of Climate Change on Flood Events Using HEC-HMS and CMIP5. *Water, Air, and Soil Pollution*, *230*(6). https://doi.org/10.1007/s11270-019-4159-0

Bardsley, W. E. (1994). Against objective statistical analysis of hydrological extremes. *Journal of Hydrology*, *162*(3–4), 429–431. https://doi.org/10.1016/0022-1694(94)90240-2

Barnston, A. G. (1992). Correspondence among the Correlation, RMSE, and Heidke Forecast Verification Measures; Refinement of the Heidke Score. *Weather and Forecasting*, *7*(4), 699–709. https://doi.org/https://doi.org/10.1175/1520-0434(1992)007<0699:CATCRA>2.0.CO;2

Basnayake, B. R. S. B., & Vithanage, J. C. (2004). Future climate scenarios of rainfall and temperature for Sri Lanka. *Proceedings of the 60th Annual Session of Sri Lanka Association for the Advancement of Science (SLASS), Section E1*, 222.

Bennett, T. H., & Peters, J. C. (2004). Continuous Soil Moisture Accounting in the Hydrologic Engineering Center Hydrologic Modeling System (HEC-HMS). *Joint Conference on Water Resource Engineering and Water Resources Planning and Management 2000: Building Partnerships*, *104*, 1–10. https://doi.org/10.1061/40517(2000)149

Bong, C. H. J., & Richard, J. (2020). Drought and climate change assessment using Standardized Precipitation Index (SPI) for Sarawak River Basin. *Journal of Water and Climate Change*, *11*(4), 956–965. https://doi.org/10.2166/WCC.2019.036

Bormann, H., & Pinter, N. (2017). Trends in low flows of German rivers since 1950: Comparability of different low-flow indicators and their spatial patterns. *River Research and Applications*, *33*(7), 1191–1204. https://doi.org/10.1002/RRA.3152

Brauer, T., & Fleming, M. (2017). Period of Record Simulation of the Russian River Watershed with the Hydrologic Modeling System (HEC-HMS). *World Environmental and Water Resources Congress 2017: Watershed Management, Irrigation and Drainage, and Water Resources Planning and Management -*

Selected Papers from the World Environmental and Water Resources Congress 2017, 12–21. https://doi.org/10.1061/9780784480601.002

Caloiero, T., Coscarelli, R., Ferrari, E., & Sirangelo, B. (2015). Analysis of Dry Spells in Southern Italy (Calabria). In *Water* (Vol. 7, Issue 6). https://doi.org/10.3390/w7063009

CEA. (2018). *Guidelines for Determination of Environmental Flows (e-flows) for Development Projects that Result in Impounding of Water in Streams/ Rivers Central*. http://203.115.26.10/2018/EIA_PUB/e-flow.pdf

Chandrapala, L. (1996, March 7). Calculation of areal precipitation of Sri Lanka on district basis using Voronoi Tessalation Method. *Proceedings of National Symposium on Climate Change*.

Chemeda, D. (2013). Dry and Wet Spell Analysis of the Two Rainy Seasons for Decision Support in Agricultural Water Management for Crop production in the Central Highlands of Ethiopia. *Journal of Biology, Agriculture and Healthcare*, *3*(11). www.iiste.org

Chen, G., & Costa, G. D. (2017). Climate change impacts on water resources case of Sri Lanka. *Nvironment and Ecology Research*, *5*(5), 347–356. https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=G.+Chen+and+G.+D.+Costa%2C+%E2%80%9CClimate+change+impacts+on+water+resources+case+of+Sri+Lanka%2C%E2%80%9D+Environment+and+Ecology+Research%2C+vol.+5%2C+no.+5%2C+pp.+347%E2%80%93356%2C+2017.&btnG=

Chen, J., Brissette, F. P., Zhang, X. J., Chen, H., Guo, S., & Zhao, Y. (2019). Bias correcting climate model multi-member ensembles to assess climate change impacts on hydrology. *Climatic Change 2019 153:3*, *153*(3), 361–377. https://doi.org/10.1007/S10584-019-02393-X

Chow, V. T., Maidment, D. R., & Mays, L. W. (1988). *Applied Hydrology* . McGraw-Hill Book Company. https://books.google.lk/books?id=RRwidSsBJrEC&printsec=copyright&source=gbs_pub_info_r#v=onepage&q&f=false

Coffey, M. E., Workman, S. R., Taraba, J. L., Fogle, A. W., Coffey, M. E. ;, Workman, S. R. ;, & Taraba, J. L. ; (2004). *Statistical Procedures for Evaluating Daily and Monthly Hydrologic Model Predictions Repository Citation*. https://doi.org/10.13031/2013.15870

CSIP. (2019). *Report on Water Demand Projections Comprehensive Strategic Investment Program (CSIP) for the Water Supply and Sanitation Sector and NWSDB Master Plan*.

Cunderlik, J. (2003). *Hydrologic model selection for the CFCAS project: assessment of water resources risk and vulnerability to changing climatic conditions*.

Cunderlik, J., & Simonovic, S. (2004). Calibration, Verification and Sensitivity Analysis of the HEC-HMS Hydrologic Model. *Water Resources Research Report*. https://ir.lib.uwo.ca/wrrr/11

Dasgupta, S., Akhter, F., Zahirul, K., Khan, H., Choudhury, S., The, A. N., & Bank, W. (2014). *River Salinity and Climate Change Evidence from Coastal Bangladesh*. http://econ.worldbank.org.

de Silva, M. M. G. T., Weerakoon, S. B., & Herath, S. (2014). Modeling of Event and Continuous Flow Hydrographs with HEC–HMS: Case Study in the Kelani River Basin, Sri Lanka. *Journal of Hydrologic Engineering*, *19*(4), 800–806. https://doi.org/10.1061/(asce)he.1943-5584.0000846

Demuth, S. Heinrich, B. (1997). Temporal and spatial behaviour of drought in south Germany. *FRIEND'97 – Regional Hydrology: Concepts and Models for Sustainable Water Resource Management, IAHS Publication*, *246*, 151–157.

Devia, G. K., Ganasri, B. P., & Dwarakish, G. S. (2015). A Review on Hydrological Models. *Aquatic Procedia*, *4*, 1001–1007. https://doi.org/10.1016/j.aqpro.2015.02.126

di Bucchianico, A. (2008). Coefficient of Determination (R2). In *Encyclopedia of Statistics in Quality and Reliability*. American Cancer Society. https://doi.org/https://doi.org/10.1002/9780470061572.eqr173

Ding, T., & Ke, Z. (2013). A comparison of statistical approaches for seasonal precipitation prediction in Pakistan. *Weather and Forecasting*, *28*(5), 1116–1132. https://doi.org/10.1175/WAF-D-12-00112.1

Dissanayaka, K. D. C. R. (2017). *Climate Extremes and Precipitation Trends in Kelani River Basin, Sri Lanka and Impact on Streamflow Variability under Climate Change*.

Dissanayake, P. M. (2017). *Applicability of a two paramter water balance model to simulate daily rainfall-runoff a case study of Kalu and Gin river basins In Sri Lanka*. http://dl.lib.mrt.ac.lk/handle/123/13027

Durman, C. F., Gregory, J. M., Hassell, D. C., Jones, R. G., & Murphy, J. M. (2001). A comparison of extreme European daily precipitation simulated by a global and a regional climate model for present and future climates. *Quarterly Journal of the Royal Meteorological Society*, *127*(573), 1005–1015. https://doi.org/10.1002/QJ.49712757316

Eriyagama, N., & Smakhtin, V. (2015). *Uncorrected Proof The Sri Lanka environmental flow calculator : a science-based tool to support sustainable national water management*. *December*. https://doi.org/10.2166/wp.2015.158

Fan, M. (2015). *ASIAN DEVELOPMENT BANK Sri Lanka's Water Supply and Sanitation Sector Achievements and a Way Forward*. www.adb.org

Flato, G., Marotzke, J., Abiodun, B., Braconnot, P., Chou, S. C., Collins, W., Cox, P., Driouech, F., Emori, S., Eyring, V., Forest, C., Gleckler, P., Guilyardi, E., Jakob, C., Kattsov, V., Reason, C., & Rummukainen, M. (2013). Evaluation of climate models. In T. F. Stocker, D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Doschung, A. Nauels, Y. Xia, V. Bex, & P. M. Midgley (Eds.), *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 741–882). Cambridge University Press. https://doi.org/10.1017/CBO9781107415324.020

Fleming, M., & Neary, V. (2004). Continuous Hydrologic Modeling Study with the Hydrologic Modeling System. *Journal of Hydrologic Engineering*, *9*(3), 175–183. https://doi.org/10.1061/(ASCE)1084-0699(2004)9:3(175)

Frei, C., Christensen, J. H., Déqué, M., Jacob, D., Jones, R. G., & Vidale, P. L. (2003). Daily precipitation statistics in regional climate models: Evaluation and intercomparison for the European Alps. *Journal of Geophysical Research: Atmospheres*, *108*(D3), n/a–n/a. https://doi.org/10.1029/2002jd002287

Frich, P., Alexander, L. v, Della-Marta, P., Gleason, B., Haylock, M., Tank, A. M. G. K., & Peterson, T. (2002). Observed coherent changes in climatic extremes during the second half of the twentieth century. *Climate Research*, *19*(3), 193–212. https://www.int-res.com/abstracts/cr/v19/n3/p193-212/

Ghimire, U., Srinivasan, G., & Agarwal, A. (2019). Assessment of rainfall bias correction techniques for improved hydrological simulation. *International Journal of Climatology*, *39*(4), 2386–2399. https://doi.org/https://doi.org/10.1002/joc.5959

Giorgi, F., Coppola, E., Solmon, F., Mariotti, L., Sylla, M. B., Bi, X., Elguindi, N., Diro, G. T., Nair, V., Giuliani, G., Turuncoglu, U. U., Cozzini, S., Güttler, I., O’Brien, T. A., Tawfik, A. B., Shalaby, A., Zakey, A. S., Steiner, A. L., Stordal, F., … Brankovic, C. (2012). RegCM4: model description and preliminary tests over multiple CORDEX domains. *Climate Research*, *52*(1), 7–29. https://doi.org/10.3354/CR01018

Good, P., Bärring, L., Giannakopoulos, C., Holt, T., & Palutikof, J. (2006). Non-linear regional relationships between climate extremes and annual mean temperatures in model projections for 1961–2099 over Europe. *Climate Research*, *31*(1), 19–34. https://doi.org/10.3354/CR031019

Green, I. R. A., & Stephenson, D. (1986). Criteria for comparison of single event models. *Hydrological Sciences Journal*, *31*(3), 395–411. https://doi.org/10.1080/02626668609491056

Guo, S., Wang, J., Xiong, L., Ying, A., & Li, D. (2002). A macro-scale and semi-distributed monthly water balance model to predict climate change impacts in China. *Journal of Hydrology*, *268*, 1–15. www.paper.edu.cn

Gupta, H. V., Sorooshian, S., & Yapo, P. O. (1999). Status of Automatic Calibration for Hydrologic Models: Comparison with Multilevel Expert Calibration. *Journal of Hydrologic Engineering*, *4*(2), 135–143. https://doi.org/10.1061/(ASCE)1084-0699(1999)4:2(135)

Gupta, H. v., Kling, H., Yilmaz, K. K., & Martinez, G. F. (2009). Decomposition of the mean squared error and NSE performance criteria: Implications for improving hydrological modelling. *Journal of Hydrology*, *377*(1–2), 80–91. https://doi.org/10.1016/J.JHYDROL.2009.08.003

Gustard, A., Bullock, A., & Dixon, J. M. (1992). *Low flow estimation in the United Kingdom*. Institute of Hydrology, Report No 108.

Halwatura, D., & Najim, M. M. M. (2013). Application of the HEC-HMS model for runoff simulation in a tropical catchment. *Environmental Modelling and Software*, *46*, 155–162. https://doi.org/10.1016/j.envsoft.2013.03.006

HEC-HMS Tutorials and Guides. (n.d.). Retrieved November 4, 2021, from https://www.hec.usace.army.mil/confluence/hmsdocs/hmsguides/applying-loss-methods-within-hec-hms/applying-the-deficit-and-constant-loss-method

Herath, M. H. B. C. W., & Wijesekera, N. T. S. (2021). Evaluation of HEC-HMS Model for Water Resources Management in Maha Oya Basin in Sri Lanka. *Engineer: Journal of the Institution of Engineers, Sri Lanka*, *54*(2), 45. https://doi.org/10.4038/engineer.v54i2.7441

Herrera, S., Fita, L., Fernández, J., & Gutiérrez, J. M. (2010). Evaluation of the mean and extreme precipitation regimes from the ENSEMBLES regional climate multimodel simulations over Spain. *Journal of Geophysical Research: Atmospheres*, *115*(D21), 21117. https://doi.org/10.1029/2010JD013936

Huang, Y. F., Ang, J. T., Tiong, Y. J., Mirzaei, M., & Amin, M. Z. M. (2016). Drought Forecasting Using SPI and EDI under RCP-8.5 Climate Change Scenarios for

Langat River Basin, Malaysia. *Procedia Engineering*, *154*, 710–717. https://doi.org/10.1016/J.PROENG.2016.07.573

Hussain, F., Wu, R.-S., & Yu, K.-C. (2021). Application of Physically Based Semi-Distributed Hec-Hms Model for Flow Simulation in Tributary Catchments of Kaohsiung Area Taiwan. *Journal of Marine Science and Technology*, *29*(1). https://doi.org/10.51400/2709-6998.1003

Hydrology Division (ID). (2019). *IDF Curves 75% Probability Rainfall Evapotranspiration*.

Jain, S. K., & Singh, V. P. (2003). *Water resources systems planning and management.* (S. K. Jain & V. P. Singh, Eds.). Elsevier Science B.V. https://www.cabdirect.org/cabdirect/abstract/20043165716

Jajarmizadeh, M., Harun, S., & Salarpour, M. (2012). A Review on Theoretical Consideration and Types of Models in Hydrology Cite this paper. *Journal of Environmental Science and Technology*, 249–261.

Jayadeera, P. M., & Wijesekera, N. T. S. (2019a). A Diagnostic Application of HEC–HMS Model to Evaluate the Potential for Water Management in the Ratnapura Watershed of Kalu Ganga Sri Lanka. *Engineer: Journal of the Institution of Engineers, Sri Lanka*, *52*(3), 11. https://doi.org/10.4038/engineer.v52i3.7361

Jayadeera, P. M., & Wijesekera, N. T. S. (2019b). A Diagnostic Application of HEC–HMS Model to Evaluate the Potential for Water Management in the Ratnapura Watershed of Kalu Ganga Sri Lanka. *Engineer: Journal of the Institution of Engineers, Sri Lanka*, *52*(3), 11. https://doi.org/10.4038/engineer.v52i3.7361

Jayatillake, H. M., Chandrapala, L., Basnayake, B. R. S. B., & Dharmaratne, G. H. P. (2005). *Water resources and climate change. Proceedings of Workshop on Sri Lanka National Water Development Report* (N. T. S. Wijesekera, K. A. U. S. Imbulana, & B. Neupane, Eds.). France: World Water Assessment Programme (WWAP). www.unesco.org/water/wwap

Jones, G. (2002). Setting Environmental Flows to Sustain a Healthy Working River. *WaterShed*, *February*.

Kanchanamala, D. P. H. M., Herath, H. M. H. K., & Nandalal, K. D. W. (2016). Impact of Catchment Scale on Rainfall Runoff Modeling: Kalu Ganga River Catchment upto Ratnapura. *Engineer: Journal of the Institution of Engineers, Sri Lanka, 49*(2), 1. https://doi.org/10.4038/engineer.v49i2.7003

Khandu, D. (2015). *monthly water balance model for evalution of climate change impacts on the streamflow of Gingaga and Kelani Ganga basins, Sri Lanka*. http://dl.lib.mrt.ac.lk/handle/123/12893

Klein Tank, A. M. G., & Können, G. P. (2003). Trends in Indices of Daily Temperature and Precipitation Extremes in Europe, 1946–99. *Journal of Climate*, *16*(22), 3665–3680.

Krause, P., Boyle, D. P., & Bäse, F. (2005a). Comparison of different efficiency criteria for hydrological model assessment. *Advances in Geosciences*, *5*, 89–97. https://doi.org/10.5194/ADGEO-5-89-2005

Krause, P., Boyle, D. P., & Bäse, F. (2005b). Comparison of different efficiency criteria for hydrological model assessment. *Advances in Geosciences*, *5*, 89–97.

Krause, P., Boyle, D. P., & Bäse, F. (2005c). Comparison of different efficiency criteria for hydrological model assessment. *Advances in Geosciences*, *5*, 89–97. https://hal.archives-ouvertes.fr/hal-00296842

Lafon, T., Dadson, S., Buys, G., & Prudhomme, C. (2013). Bias correction of daily precipitation simulated by a regional climate model: A comparison of methods. *International Journal of Climatology*, *33*(6), 1367–1381. https://doi.org/10.1002/joc.3518

Lana, X., Martínez, M. D., Burgueño, A., Serra, C., Martín-Vide, J., & Gómez, L. (2006). Distributions of long dry spells in the iberian peninsula, years 1951–1990. *International Journal of Climatology*, *26*(14), 1999–2021. https://doi.org/https://doi.org/10.1002/joc.1354

Lars, B., Tom, H., Maj -Lena, L., Maciej, R., Marco Moriondo, & Jean, P. P. (2006). CLIMATE RESEARCH Clim Res. *Climate Research*, *31*, 35–49. www.int-res.com

Legates, D. R., & McCabe, G. J. (1999). Evaluating the use of "goodness-of-fit" Measures in hydrologic and hydroclimatic model validation. *Water Resources Research*, *35*(1), 233–241. https://doi.org/10.1029/1998WR900018

Lenderink, G., Buishand, A., & van Deursen, W. (2007). Estimates of future discharges of the river Rhine using two scenario methodologies: direct versus delta approach. *Hydrology and Earth System Sciences*, *11*(3). www.hydrol-earth-syst-sci.net/11/1145/2007

Li, Z., Li, Y., Shi, X., & Li, J. (2017). The characteristics of wet and dry spells for the diverse climate in China. *Global and Planetary Change*, *149*, 14–19. https://doi.org/10.1016/j.gloplacha.2016.12.015

Luo, M., Liu, T., Meng, F., Duan, Y., Frankl, A., Bao, A., & de Maeyer, P. (2018). Comparing bias correction methods used in downscaling precipitation and temperature from regional climate models: A case study from the Kaidu River Basin in Western China. *Water (Switzerland)*, *10*(8). https://doi.org/10.3390/w10081046

Madsen, H., Wilson, G., & Ammentorp, H. C. (2002). Comparison of different automated strategies for calibration of rainfall-runoff models. *Journal of Hydrology*, *261*(1–4), 48–55. www.elsevier.com/locate/jhydrol

Mahmood, R., Jia, S., Tripathi, N. K., & Shrestha, S. (2018). Precipitation extended linear scaling method for correcting GCM precipitation and its evaluation and implication in the transboundary Jhelum River basin. *Atmosphere*, *9*(5). https://doi.org/10.3390/atmos9050160

Maracchi, G., Sirotenko, O., & Bindi, M. (2005). Impacts of Present and Future Climate Variability on Agriculture and Forestry in the Temperate Regions: Europe. *Climatic Change*, *70*(1), 117–135. https://doi.org/10.1007/s10584-005-5939-7

Marambe, B., Punyawardena, R., Silva, P., Premalal, S., Rathnabharathie, V., Kekulandala, B., Nidumolu, U., & Howden, M. (2015). Climate, Climate Risk, and Food Security in Sri Lanka: The Need for Strengthening Adaptation

Strategies. In *Handbook of Climate Change Adaptation* (pp. 1759–1789). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-38670-1_120

Mckee, T. B., Doesken, N. J., & Kleist, J. (1993). THE RELATIONSHIP OF DROUGHT FREQUENCY AND DURATION TO TIME SCALES. In *Eighth Conference on Applied Climatology*.

McMahon, T. A., Peel, M. C., Lowe, L., Srikanthan, R., & McVicar, T. R. (2013). Estimating actual, potential, reference crop and pan evaporation using standard meteorological data: a pragmatic synthesis. *Hydrology and Earth System Sciences*, *17*(4), 1331–1363. https://doi.org/10.5194/hess-17-1331-2013

Meenu, R., Rehana, S., & Mujumdar, P. P. (2013). Assessment of hydrologic impacts of climate change in Tunga-Bhadra river basin, India with HEC-HMS and SDSM. *Hydrological Processes*, *27*(11), 1572–1589. https://doi.org/10.1002/hyp.9220

Miller, M. P., Buto, S. G., Susong, D. D., & Rumsey, C. A. (2016). The importance of base flow in sustaining surface water flow in the Upper Colorado River Basin. *Water Resources Research*, *52*(5), 3547–3562. https://doi.org/10.1002/2015WR017963

Mishra, A. K., & Singh, V. P. (2010). A review of drought concepts. *Journal of Hydrology*, *391*(1), 202–216. https://doi.org/https://doi.org/10.1016/j.jhydrol.2010.07.012

Mizukami, N., Rakovec, O., Newman, A. J., Clark, M. P., Wood, A. W., Gupta, H. v., & Kumar, R. (2019). On the choice of calibration metrics for “high-flow” estimation using hydrologic models. *Hydrology and Earth System Sciences*, *23*(6), 2601–2614. https://doi.org/10.5194/HESS-23-2601-2019

Mngodo, R. J. (1997). Flow duration characteristics of Southern African rivers. *FRIEND’97 – Regional Hydrology: Concepts and Models for Sustainable Water Resource Management, IAHS Publication*, *246*, 49–63.

Moormakn, F. R., & Panabokke, C. R. (1961). *Soils of Ceylon*.

Moradkhani, H., & Sorooshian, Soroosh. (2008). General Review of Rainfall-Runoff Modeling: Model Calibration, Data Assimilation, and Uncertainty Analysis. *Hydrological Modeling and the Water Cycle.Springer*, *63*, 290.

Moriasi, D. N., Arnold, J. G., Liew, M. W. van, Bingner, R. L., Harmel, R. D., & Veith, T. L. (2007). MODEL EVALUATION GUIDELINES FOR SYSTEMATIC QUANTIFICATION OF ACCURACY IN WATERSHED SIMULATIONS. *Transactions of the American Society of Agricultural and Biological Engineers ASABE*, *50*(3).

Mukherjee, S., Mishra, A., & Trenberth, K. E. (2018). Climate Change and Drought: a Perspective on Drought Indices. *Current Climate Change Reports*, *4*(2), 145–163. https://doi.org/10.1007/s40641-018-0098-x

Nandalal, K. D. W. (2009). Use of a hydrodynamic model to forecast floods of Kalu River in Sri Lanka. *Journal of Flood Risk Management*, *2*(3), 151–158. https://doi.org/10.1111/J.1753-318X.2009.01032.X

Nyunt, T. C., Yamamoto, H., Yamamoto, A., Nemoto, T., Kitsuregawa, M., & Koike, T. (2012). A PPLICATION OF BIAS-CORRECTION AND DOWNSCALING METHOD TO KALU GANGA BASIN IN SRI LANKA. *Journal of Japan Society of Civil Engineers, JSCE*, *68*(4), 115–120.

Oleyiblo, J. O., & Li, Z. J. (2010). Application of HEC-HMS for flood forecasting in Misai and Wan'an catchments in China. *Water Science and Engineering*, *3*(1), 14–22. https://doi.org/10.3882/j.issn.1674-2370.2010.01.002

Osborn, T. J. (1997). Areal and point precipitation intensity changes: Implications for the application of climate models. *Geophysical Research Letters*, *24*(22), 2829–2832. https://doi.org/https://doi.org/10.1029/97GL02976

P1 Manual – Project Planning Feasibility (2nd Rev). (2019). National Water Supply and Drainage Board.

Pathirana, A., Herath, S., Yamada, T., & Swain, D. (2007). Impacts of absorbing aerosols on South Asian rainfall. *Climatic Change*, *85*(1), 103–118. https://doi.org/10.1007/s10584-006-9184-5

Perera, K. R. J., & Wijesekera, N. T. S. (2011). Identification of the Spatial Variability of Runoff Coefficients of Three Wet Zone Watersheds of Sri Lanka. *Engineer: Journal of the Institution of Engineers, Sri Lanka*, *44*(3), 1. https://doi.org/10.4038/ENGINEER.V44I3.6960

Peterson, T. C., Folland, C. K., Gruza, G., Hogg, W., Mokssit, A., & Plummer, N. (2001). *Report on the Activities of the Working Group on Climate Change Detection and Related Rapporteurs 1998-2001, Reports WCDMP-47, WMO-TD 1071*.

Petts, G. E. (2009). Instream Flow Science for Sustainable River Management. *Journal of the American Water Resources Association (JAWRA)*, *45*(5), 1071–1086. https://doi.org/10.1111/j.1752-1688.2009.00360.x

Ponrajah, A. J. P. (1984). *Design of Irrigation Systems for Small Catchments* (2nd ed.). Irrigation Department.

Ponrajah, A. J. P. (1989). *Technical Guidelines for Irrigation Works*. Irrigation Department., Sri Lanka.

Pre-feasibility Report - Aluthgama Mathugama Agalawatta Integrated Water Supply Project. (2011).

Premalal, K. H. M. S. (2009). *Weather and climate trends, climate controls & risks in Sri Lanka*. Department of Meteorology.

Prisloe, M., Educator, G., & Manager, G. (2000, September 10). Determining Impervious Surfaces for Watershed Modeling Applications. *National Nonpoint Source Monitoring Conference*.

Punyawardena, B. V. R., Mehmood, S., Hettiarachchi, A. K., Iqbal, M., de Silva, S. H. S. A., & Goheer, A. (2013). Future climate of Sri Lanka: an approach through dynamic downscaling of ECHAM4 General Circulation Model (GCM). *Tropical Agriculturist*, *161*, 35–52. https://www.cabdirect.org/cabdirect/abstract/20143293785

Ratna, S. B., Ratnam, J. v., Behera, S. K., Rautenbach, C. J. de W., Ndarana, T., Takahashi, K., & Yamagata, T. (2014). Performance assessment of three convective parameterization schemes in WRF for downscaling summer rainfall over South Africa. *Climate Dynamics*, *42*(11–12), 2931–2953. https://doi.org/10.1007/S00382-013-1918-2

Rawls, W. J., Brakensiek, D. L., & Miller, N. (1983). Greenampt Infiltration Parameters from Soils Data. *Journal of Hydraulic Engineering*, *109*(1), 62–70. https://doi.org/10.1061/(ASCE)0733-9429(1983)109:1(62)

Raymond, F., Ullmann, A., Camberlin, P., Drobinski, P., & Chateau Smith, C. (2016). Extreme dry spell detection and climatology over the Mediterranean Basin during the wet season. Geophysical Research Letters Extreme dry spell detection and climatology over the Mediterranean Basin during the wet season. *Geophysical Research Letters*, *13*, 7196–7204. https://doi.org/10.1002/2016GL069758ï

Rivoire, P., Tramblay, Y., Neppel, L., Hertig, E., & Vicente-Serrano, S. M. (2019). Impact of the dry-day definition on Mediterranean extreme dry-spell analysis. *Natural Hazards and Earth System Sciences*, *19*(8), 1629–1638. https://doi.org/10.5194/nhess-19-1629-2019

Rosenberg, D. M., McCully, P., & Pringle, C. M. (2000). Global-scale environmental effects of hydrological alterations: introduction. *Bio Science*, *50*(9), 746–751.

Sampath, D. S., Weerakoon, S. B., & 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: Journal of the Institution of Engineers, Sri Lanka*, *XLVIII*(01), 1–9. http://iesl.nsf.ac.lk/bitstream/handle/1/1846/Engineer-2015-48%281%29_1.pdf?sequence=2&isAllowed=y

Sanjay, J., Ramarao, M. V. S., Mahesh, R., Ingle, S., Singh, B., & Krishnan, R. (2012). *Regional Climate Change Datasets for South Asia*. http://cccr.tropmet.res.in/home/reports.jsp

Sapač, K., Medved, A., Rusjan, S., & Bezak, N. (2019). Investigation of low- and high-flow characteristics of karst catchments under climate change. *Water (Switzerland)*, *11*(5). https://doi.org/10.3390/w11050925

Scharffenberg, B., Bartles, M., Brauer, T., Fleming, M., & Karlovits, G. (2018). *Hydrologic Modeling System HEC-HMS User's Manual CPD-74A* (4.3). United States Army Corps of Engineers, Hydrologic Engineering Centre.

Schulz, L., & Kingston, D. G. (2017). GCM-related uncertainty in river flow projections at the threshold for "dangerous" climate change: the Kalu Ganga river, Sri Lanka. *Hydrological Sciences Journal*, *62*(14), 2369–2380. https://doi.org/10.1080/02626667.2017.1381965

Semenov, V., & Bengtsson, L. (2002). Secular trends in daily precipitation characteristics: greenhouse gas simulation with a coupled AOGCM. *Climate Dynamics*, *19*(2), 123–140. https://doi.org/10.1007/s00382-001-0218-4

Sharifi, M. (2015). *Calibration and verificaion of a-two paramter montly water balance model and Its application potential for evalution of water resourcesa case study of Kalu and Mahaweli rivers of Sri Lanka*. http://dl.lib.mrt.ac.lk/handle/123/12954

Sharma, D., Gupta, A. das, & Babel, M. S. (2007). Spatial disaggregation of bias-corrected GCM precipitation for improved hydrologic simulation: Ping River Basin, Thailand. *Hydrology and Earth System Sciences*, *11*(4), 1373–1390. https://doi.org/10.5194/HESS-11-1373-2007

Shrestha, S., & Deb, P. (n.d.). *HYDROLOGY: MEASUREMENT AND ANALYSIS*. Asian Institute of Technology (AIT).

Singh Thakuri Pratik. (2016). *Suitability of a Selected Hydrological Model and Objective Function for Rural Watershed Management in Sri Lanka*.

Sirisena, T. A. J. G., Maskey, S., Bamunawala, J., Coppola, E., & Ranasinghe, R. (2021). Projected Streamflow and Sediment Supply under Changing Climate to the Coast of the Kalu River Basin in Tropical Sri Lanka over the 21st Century. *Water*, *13*(21), 3031. https://doi.org/10.3390/w13213031

Smakhtin, V., & Anputhas, M. (2006). An Assessment of Environmental Flow Requirements of Indian River Basins. *IWMI Research Report 107*, *107*, 37. http://dx.doi.org/10.3910/2009.106

Smakhtin, V. U. (2001). Low flow hydrology: A review. *Journal of Hydrology*, *240*(3–4), 147–186. https://doi.org/10.1016/S0022-1694(00)00340-1

Solberg, S. (2004). Summer drought: a driver for crown condition and mortality of Norway spruce in Norway. *Forest Pathology*, *34*(2), 93–104. https://doi.org/10.1111/J.1439-0329.2004.00351.X

Sonoda, H. (2007). *Kukule Ganga Hydroelectric Power Project (Field Survey: November 2007)*. https://www.jica.go.jp/english/our_work/evaluation/oda_loan/post/2008/pdf/e_project07_full.pdf

Sorooshian, S. (2008). *Hydrological modelling and the water cycle : coupling the atmospheric and hydrological models*. Springer.

Tan, X., Liu, B., & Tan, X. (2020). Global Changes in Baseflow Under the Impacts of Changing Climate and Vegetation. *Water Resources Research*, *56*(9). https://doi.org/10.1029/2020WR027349

Taylor, K. E., Stouffer, R. J., & Meehl, G. A. (2012). An overview of CMIP5 and the experiment design. In *Bulletin of the American Meteorological Society* (Vol. 93, Issue 4, pp. 485–498). https://doi.org/10.1175/BAMS-D-11-00094.1

Tennant, D. L. (1976). Instream Flow Regimens for Fish, Wildlife, Recreation and Related Environmental Resources. *Fisheries*, *1*(4), 6–10. https://doi.org/10.1577/1548-8446(1976)001<0006:IFRFFW>2.0.CO;2

Thapa, B., Danegulu, A., Suwal, N., Upadhyay, S., Manandhar, B., & Prajapati, R. (2020). RAINFALL-RUNOFF MODELLING OF THE WEST RAPTI BASIN, NEPAL. *Issue 1 TECHNICAL JOURNAL TECHNICAL JOURNAL*, *2*(1). http://dhm.gov.np/

The Program for Climate Model Diagnosis and Intercomparison. (2014). https://pcmdi.llnl.gov/about.html

Todd Howard Bennett. (1998). *Development and application of a continuous soil moisture accounting algorithm for the Hydrologic Engineering Center Hydrologic Modeling System (HEC-HMS) (Book, 1998) [WorldCat.org]* [M.S.

University of California]. https://www.worldcat.org/title/development-and-application-of-a-continuous-soil-moisture-accounting-algorithm-for-the-hydrologic-engineering-center-hydrologic-modeling-system-hec-hms/oclc/42712111

USACE. (n.d.). *Hydrologic Modeling System HEC-HMS User's Manual - Version 4.7.1*. United States Army Corps of Engineers, Hydrologic Engineering Centre. Retrieved November 4, 2021, from https://www.hec.usace.army.mil/confluence/hmsdocs/hmsum/4.7.1

USACE. (2000). *Hydrologic Modeling System HEC-HMS Technical Reference Manual* (A. D. Feldman, Ed.; 4.3). United States Army Corps of Engineers, Hydrologic Engineering Centre.

Vicente-Serrano, S. M., & Beguería-Portugués, S. (2003). Estimating extreme dry-spell risk in the middle Ebro valley (northeastern Spain): a comparative analysis of partial duration series with a general Pareto distribution and annual maxima series with a Gumbel distribution. *International Journal of Climatology*, *23*(9), 1103–1118. https://doi.org/https://doi.org/10.1002/joc.934

Vogel, R. M., & Fennessey, N. M. (1994). Flow duration curves. I. A new interpretation and confidence intervals. *J. Water Resour. Plan. Manag*, *120*(4), 485–504.

Wang, M., Zhang, L., & Baddoo, T. D. (2016). Hydrological Modeling in A Semi-Arid Region Using HEC-HMS. *Journal of Water Resource and Hydraulic Engineering*, *5*(3), 105–115. https://doi.org/10.5963/jwrhe0503004

Wijesekera, N. T. S., & Abeynayake, J. C. (2003). Watershed similarity conditions for peak flow transition. A study of river basins in the wet zone of Sri Lanka. *Engineer, Journal of the Institution of Engineers Sri Lanka*.

Willmott, C. J., & Matsuura, K. (2005). Advantages of the mean absolute error (MAE) over the root mean square error (RMSE) in assessing average model performance. *Undefined*, *30*(1), 79–82. https://doi.org/10.3354/CR030079

(WMO). (2009). Manual on Low-flow Estimation and Prediction. Operational Hydrology Report No. 50. WMO-No. 1029. In A. Gustard & S. Demuth (Eds.), *Operational Hydrology Report: Vol. No, 50* (Issue 1029). World Meteorological Organization.

Wood, A. W., Leung, L. R., Sridhar, V., & Lettenmaier, D. P. (2004). Hydrologic implications of dynamical and statistical approaches to downscaling climate model outputs. *Climatic Change*, *62*, 189–216. https://cig.uw.edu/publications/hydrologic-implications-of-dynamical-and-statistical-approaches-to-downscaling-climate-model-outputs/

Xuefeng, C., & Alan, S. (2009). Event and Continuous Hydrologic Modeling with HEC-HMS. *Journal of Irrigation and Drainage Engineering*, *135*(1), 119–124. https://doi.org/10.1061/(ASCE)0733-9437(2009)135:1(119)