

DAFTAR PUSTAKA

- Abburu, S., & Golla, S. B. (2015). Satellite Image Classification Methods and Techniques: A Review. In *International Journal of Computer Applications* (Vol. 119, Issue 8).
- Abu El-Magd, S. A., Orabi, H. O., Ali, S. A., Parvin, F., & Pham, Q. B. (2021). An integrated approach for evaluating the flash flood risk and potential erosion using the hydrologic indices and morpho-tectonic parameters. *Environmental Earth Sciences*, *80*(20). <https://doi.org/10.1007/s12665-021-10013-0>
- Adane, G. B., Hirpa, B. A., Gebru, B. M., Song, C., & Lee, W. K. (2021). Integrating satellite rainfall estimates with hydrological water balance model: Rainfall-runoff modeling in awash river basin, ethiopia. *Water (Switzerland)*, *13*(6). <https://doi.org/10.3390/w13060800>
- Ai, B., Huang, W., & Li, Y. (2022). Spatial accessibility analysis of urban parks in typical karst area based on minimum cost of proximity: A case study of Guiyang City; [基于最小邻近成本的喀斯特山地城市公园可达性分析—以贵阳市为例]. *Carsologica Sinica*, *41*(6), 952 – 961. <https://doi.org/10.11932/karst20220607>
- Akar, O., & Tunc Gormus, E. (2022). Land use/land cover mapping from airborne hyperspectral images with machine learning algorithms and contextual information. *Geocarto International*, *37*(14), 3963 – 3990. <https://doi.org/10.1080/10106049.2021.1945149>
- Almeida, W., Seitz, S., Oliveira, L. F. C., & Carvalho, D. F. (2020). Duration and intensity of rainfall events with the same erosivity change sediment yield and runoff rates. *International Soil and Water Conservation Research*, *9*, 69–75. <https://doi.org/10.1016/j.iswcr.2020.10.004>
- Amarasinghe, A. A. T., Putra, C. A., Henkanaththegedara, S. M., Dwiyahreni, A. A., Winarni, N. L., Sunaryo, Margules, C., & Supriatna, J. (2021). Herpetofaunal diversity of West Bali National Park, Indonesia with identification of indicator species for long-term monitoring. *Global Ecology and Conservation*, *28*. <https://doi.org/10.1016/j.gecco.2021.e01638>
- Anggraheni, E., Sutjiningsih, D., Emmanuel, I., Payrastre, O., & Andrieu, H. (2018). Assessing the role of spatial rainfall variability on watershed response based on weather radar data (A Case study of the Gard Region, France). *International Journal of Technology*, *9*(3), 568–577. <https://doi.org/10.14716/ijtech.v9i3.498>

- Asdak, C. (2007). *Hidrologi dan Pengelolaan Daerah Aliran Sungai* (4th ed.). UGM PRESS.
- Babaei, F., Zolfaghari, A., Yazdani, M., & Sadeghipour, A. (2018). Spatial analysis of infiltration in agricultural lands in arid areas of Iran. *CATENA*. <https://doi.org/10.1016/J.CATENA.2018.05.039>
- Barnes, G. (2001). Severe Local Storms in the Tropics. *Meteorological Monographs*, 28, 359–432. <https://doi.org/10.1175/0065-9401-28.50.359>
- Beilicci, E., & Beilicci, R. (2015). Flash floods-causes, effects, possibilities of modelling with hydroinformatic tools. *International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM*, 1(3), 309 – 316. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84946558081&partnerID=40&md5=48f94fcad58789eed7e9277c31a5e40b>
- Belgiu, M., & Drăgu, L. (2016). Random forest in remote sensing: A review of applications and future directions. In *ISPRS Journal of Photogrammetry and Remote Sensing* (Vol. 114, pp. 24–31). Elsevier B.V. <https://doi.org/10.1016/j.isprsjprs.2016.01.011>
- Berihun, M. L., Tsunekawa, A., Haregeweyn, N., Meshesha, D. T., Adgo, E., Tsubo, M., Masunaga, T., Fenta, A. A., Sultan, D., Yibeltal, M., & Ebabu, K. (2019). Hydrological responses to land use/land cover change and climate variability in contrasting agro-ecological environments of the Upper Blue Nile basin, Ethiopia. *Science of the Total Environment*, 689, 347–365. <https://doi.org/10.1016/j.scitotenv.2019.06.338>
- Bouaziz, M., Eisold, S., & Guermazi, E. (2017). Semiautomatic approach for land cover classification: a remote sensing study for arid climate in southeastern Tunisia. *Euro-Mediterranean Journal for Environmental Integration*, 2(1). <https://doi.org/10.1007/s41207-017-0036-7>
- Bouchagoura, L., Medjani, F., Zahi, F., & Djidel, M. (2024). Integrating remote sensing classification techniques for land use mapping in semi-arid regions: a case study of the Tamlouka basin, Algeria. *Environmental Monitoring and Assessment*, 196(7). <https://doi.org/10.1007/s10661-024-12757-1>
- Breiman, L. (2001). Random Forests. *Machine Learning*, 45, 5–32. <https://doi.org/https://doi.org/10.1023/A:1010933404324>
- Bronstert, A., Niehoff, D., & Schiffler, G. R. (2023). Modelling infiltration and infiltration excess: The importance of fast and local processes. *Hydrological Processes*, 37(4). <https://doi.org/10.1002/hyp.14875>

- Cantón, Y., Del Barrio, G., Solé-Benet, A., & Lázaro, R. (2004). Topographic controls on the spatial distribution of ground cover in the Tabernas badlands of SE Spain. *CATENA*, 55(3), 341–365. [https://doi.org/https://doi.org/10.1016/S0341-8162\(03\)00108-5](https://doi.org/https://doi.org/10.1016/S0341-8162(03)00108-5)
- Cao, Y., Zhang, J., Yang, M., Lei, X., Guo, B., Yang, L., Zeng, Z., & Qu, J. (2018). Application of SWAT model with CMADS data to estimate hydrological elements and parameter uncertainty based on SUFI-2 algorithm in the Lijiang River basin, China. *Water (Switzerland)*, 10(6). <https://doi.org/10.3390/w10060742>
- Cavur, M., Duzgun, H. S., Kemec, S., & Demirkan, D. C. (2019). Land use and land cover classification of Sentinel 2-A: St Petersburg case study. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives*, 42(1/W2), 13–16. <https://doi.org/10.5194/isprs-archives-XLII-1-W2-13-2019>
- Chalov, R. S. (2011). Sediment runoff, transporting capacity of flows and their role in river channel formation. *Geography and Natural Resources*, 32(3), 220–225. <https://doi.org/10.1134/S1875372811030036>
- Christanto, N. (2022). *MODELING HYDROLOGICAL PROCESSES IN HUMID TROPICAL WATERSHED USING SWAT: A CASE STUDY IN CENTRAL JAVA WATERSHED, INDONESIA* [Doctoral Dissertation, Universitas Gadjah Mada]. <https://etd.repository.ugm.ac.id/penelitian/detail/210257>
- Costa, H., Carrão, H., Bação, F., & Caetano, M. (2014). Combining per-pixel and object-based classifications for mapping land cover over large areas. *International Journal of Remote Sensing*, 35(2), 738 – 753. <https://doi.org/10.1080/01431161.2013.873151>
- Costache, R. (2019). Flash-flood Potential Index mapping using weights of evidence, decision Trees models and their novel hybrid integration. *Stochastic Environmental Research and Risk Assessment*, 33(7), 1375–1402. <https://doi.org/10.1007/s00477-019-01689-9>
- Criss, R. E., & Winston, W. E. (2008). Properties of a diffusive hydrograph and the interpretation of its single parameter. *Mathematical Geosciences*, 40(3), 313–325. <https://doi.org/10.1007/s11004-008-9145-9>
- Cui, X., Li, S., Li, Z., & Dong, Z. (2024). Exploring the Impact of Mountain Urban Characteristics on Housing Prices: A Study Utilizing Street View Visual Features. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, 10(4), 91–98. <https://doi.org/10.5194/isprs-annals-X-4-2024-91-2024>

- Danoedoro, P. (2003). Multisource Classification for Land-Use Mapping Based On Spectral, Textural, and Terrain Information Using Landsat Thematic Mapper Imagery, A Case Study of Semarang-Ungaran Area, Central Java. *Indonesian Journal of Geography*, 35(2), 81–106. <https://doi.org/DOI:10,22146/ijg,57273>
- Danoedoro, P. (2024). *Penginderaan jauh: Posisi, Paradigma, dan Pemodelannya dalam Kajian Ekologi Bentanglahan*. Universitas Gadjah Mada.
- Dash, S. S., Naik, B., & Kashyap, P. S. (2024). Assessment of land use/ land cover change derived catchment hydrologic response: An integrated parsimonious hydrological modeling and alteration analysis based approach. *Journal of Environmental Management*, 356, 120637. <https://doi.org/https://doi.org/10.1016/j.jenvman.2024.120637>
- De Almeida Bressiani, D., Srinivasan, R., Jones, C. A., & Mendiondo, E. M. (2015). Effects of different spatial and temporal weather data resolutions on the stream flow modeling of a semi-arid basin, Northeast Brazil. *International Journal of Agricultural and Biological Engineering*, 8(3), 1–16. <https://doi.org/10.3965/j.ijabe.20150803.970>
- Devadarshini, E., Bhuvaneswari, K., Mohan Kumar, S., Geethalakshmi, V., Dhasarathan, M., Senthil, A., Senthilraja, K., Mushtaq, S., Nguyen-Huy, T., Mai, T., & Kouadio, L. (2024). Spatiotemporal performance evaluation of high-resolution multiple satellite and reanalysis precipitation products over the semiarid region of India. *Environmental Monitoring and Assessment*, 196(11), 1006. <https://doi.org/10.1007/s10661-024-13152-6>
- Dostál, T., Jáchymová, B., Bauer, M., & Krása, J. (2021). Possibilities of the Identification of Localities Endangered by Surface Runoff and Sediment Transport for Purposes of Landscape Planning; [Možnosti identifikace rizikových lokalit v krajině z hlediska ochrany infrastruktury před poškozením povodňovými událostmi]. *Clovek, Stavba a Uzemní Planovani - Man, Building and Urban Planning*, 68 – 85. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85139147704&partnerID=40&md5=a8ba15fad3ad3a1621bbd891580ae85a>
- Ebel, D., & Grossman, L. (2023). Condensation in dust-enriched systems. *Geochimica et Cosmochimica Acta*, 64, 339–366. [https://doi.org/10.1016/S0016-7037\(99\)00284-7](https://doi.org/10.1016/S0016-7037(99)00284-7)
- Ebrahimian, A., Wadzuk, B., & Traver, robert. (2019). Evapotranspiration in green stormwater infrastructure systems.pdf. *Science of the Total Environment*, 688, 797–810. <https://doi.org/https://doi.org/10.1016/j.scitotenv.2019.06.256>

- El Harraki, W., Ouazar, D., Bouziane, A., El Harraki, I., & Hasnaoui, D. (2021). Streamflow Prediction Upstream of a Dam Using SWAT and Assessment of the Impact of Land Use Spatial Resolution on Model Performance. *Environmental Processes*, 8(3), 1165–1186. <https://doi.org/10.1007/s40710-021-00532-0>
- Fang, H., Sun, L., & Tang, Z. (2015). Effects of rainfall and slope on runoff, soil erosion and rill development: An experimental study using two loess soils. *Hydrological Processes*, 29(11), 2649–2658. <https://doi.org/10.1002/hyp.10392>
- Feng, J., Wei, W., & Pan, D. (2020). Effects of rainfall and terracing-vegetation combinations on water erosion in a loess hilly area, China. *Journal of Environmental Management*, 261, 110247. <https://doi.org/https://doi.org/10.1016/j.jenvman.2020.110247>
- Fengchi, G., Xu, M., Gong, C., Zhang, Z., & Tan, Q. (2022). Land cover changes the soil moisture response to rainfall on the Loess Plateau. *Hydrological Processes*, 36. <https://doi.org/10.1002/hyp.14714>
- Ferreira, C. S. S., Duarte, A. C., Kasanin-Grubin, M., Kapovic-Solomun, M., & Kalantari, Z. (2022). Chapter Three - Hydrological challenges in urban areas. In P. Pereira & C. S. S. Ferreira (Eds.), *Urban Soil and Water Degradation* (Vol. 8, Issue 1, pp. 47–67). Elsevier. <https://doi.org/https://doi.org/10.1016/bs.apmp.2022.09.001>
- García-Marín, A. P., Estévez, J., Morbidelli, R., Saltalippi, C., Ayuso-Muñoz, J. L., & Flammini, A. (2020). Assessing inhomogeneities in extreme annual rainfall data series by multifractal approach. *Water (Switzerland)*, 12(4). <https://doi.org/10.3390/W12041030>
- Ghimire, B., & Deng, Z. (2013). Hydrograph-based approach to modeling bacterial fate and transport in rivers. *Water Research*, 47(3), 1329–1343. <https://doi.org/10.1016/j.watres.2012.11.051>
- Goswami, A., Pillai, S. C., & McGranaghan, G. (2021). Surface modifications to enhance dropwise condensation. *Surfaces and Interfaces*, 25, 101143. <https://doi.org/https://doi.org/10.1016/j.surfin.2021.101143>
- Gruchot, A., Zydrón, T., Wałęga, A., Pařílková, J., & Stanisiz, J. (2022). Influence of Rainfall Events and Surface Inclination on Overland and Subsurface Runoff Formation on Low-Permeable Soil. *Sustainability (Switzerland)*, 14(9). <https://doi.org/10.3390/su14094962>
- He, Z., Jia, G., Liu, Z., Zhang, Z., Yu, X., & Xiao, P. (2020). Field studies on the influence of rainfall intensity, vegetation cover and slope length on soil moisture

- infiltration on typical watersheds of the Loess Plateau, China. *Hydrological Processes*, 34, 4904–4919. <https://doi.org/10.1002/hyp.13892>
- Heydari, S. S., & Mountrakis, G. (2018). Effect of classifier selection, reference sample size, reference class distribution and scene heterogeneity in per-pixel classification accuracy using 26 Landsat sites. *Remote Sensing of Environment*, 204, 648–658. <https://doi.org/10.1016/j.rse.2017.09.035>
- Hidayat, R., & Zahro, A. A. (2018). IDENTIFIKASI CURAH HUJAN PEMICU LONGSOR DI DAERAH ALIRAN SUNGAI (DAS) SERAYU HULU-BANJARNEGARA. *Prosiding Seminar Nasional Geografi UMS IX*, 41–50.
- Horton, R. E. (1945). Erosional development of streams and their drainage basins; Hydrophysical approach to quantitative morphology. *Bulletin of the Geological Society of America*, 56(3), 275–370. [https://doi.org/10.1130/0016-7606\(1945\)56\[275:EDOSAT\]2.0.CO;2](https://doi.org/10.1130/0016-7606(1945)56[275:EDOSAT]2.0.CO;2)
- Huang, X., Zhou, T., Turner, A., Dai, A., Chen, X., Clark, R., Jiang, J., Man, W., Murphy, J., Rostron, J., Wu, B., Zhang, L., Zhang, W., & Zou, L. (2020). The Recent Decline and Recovery of Indian Summer Monsoon Rainfall: Relative Roles of External Forcing and Internal Variability. *Journal of Climate*. <https://doi.org/10.1175/jcli-d-19-0833.1>
- Huang, Y., Zhao, C., Yang, H., Song, X., Chen, J., & Li, Z. (2017). Feature selection solution with high dimensionality and low-sample size for land cover classification in object-based image analysis. *Remote Sensing*, 9(9). <https://doi.org/10.3390/rs9090939>
- Ibarra-Zavaleta, S. P., Landgrave, R., Romero-López, R., Poulin, A., & Arango-Miranda, R. (2017). Distributed hydrological modeling: Determination of theoretical hydraulic potential & streamflow simulation of extreme hydrometeorological events. *Water (Switzerland)*, 9(8). <https://doi.org/10.3390/w9080602>
- Ikeura, H., Phongchanmixay, S., Phonsangone, S., Xaypanya, P., Inkhamseng, S., & Soubat, S. (2016). Factors affecting differences in the rainy season rice yield in a lowland area of a mountainous village in Lao PDR. *Paddy and Water Environment*, 14(2), 343–353. <https://doi.org/10.1007/s10333-015-0504-0>
- Indriani, R. F., Anjasmara, I. M., Utama, W., Paramita, E. G. K., & Nainggolan, R. A. O. (2023). Comparative Analysis of Physiographic Study for Hydrology of Benowo Region, Surabaya. *IOP Conference Series: Earth and Environmental Science*, 1250(1). <https://doi.org/10.1088/1755-1315/1250/1/012015>

- Inglezakis, V. J., Pouloupoulos, S. G., Arkhangelsky, E., Zorpas, A. A., & Menegaki, A. N. (2016). Chapter 3 - Aquatic Environment. In S. G. Pouloupoulos & V. J. Inglezakis (Eds.), *Environment and Development* (pp. 137–212). Elsevier. <https://doi.org/https://doi.org/10.1016/B978-0-444-62733-9.00003-4>
- Jiang, A., Zhang, W., Liu, X., Zhou, F., Li, A., Peng, H., & Wang, H. (2024). Improving hydrological process simulation in mountain watersheds: Integrating WRF model gridded precipitation data into the SWAT model. *Journal of Hydrology*, *639*, 131687. <https://doi.org/https://doi.org/10.1016/j.jhydrol.2024.131687>
- Kabite Wedajo, G., Kebede Muleta, M., & Gessesse Awoke, B. (2021). Performance evaluation of multiple satellite rainfall products for Dhidhessa River Basin (DRB), Ethiopia. *Atmospheric Measurement Techniques*, *14*(3), 2299–2316. <https://doi.org/10.5194/amt-14-2299-2021>
- Kaffas, K., Papaioannou, G., Varlas, G., Al Sayah, M. J., Papadopoulos, A., Dimitriou, E., Katsafados, P., & Righetti, M. (2022). Forecasting soil erosion and sediment yields during flash floods: The disastrous case of Mandra, Greece, 2017. *Earth Surface Processes and Landforms*, *47*(7), 1744–1760. <https://doi.org/10.1002/esp.5344>
- Kannan, N., Santhi, C., Williams, J. R., & Arnold, J. G. (2008). Development of a continuous soil moisture accounting procedure for curve number methodology and its behaviour with different evapotranspiration methods. *Hydrological Processes*, *22*(13), 2114 – 2121. <https://doi.org/10.1002/hyp.6811>
- Kassawmar, T., Eckert, S., Hurni, K., Zeleke, G., & Hurni, H. (2018). Reducing landscape heterogeneity for improved land use and land cover (LULC) classification across the large and complex Ethiopian highlands. *Geocarto International*, *33*(1), 53 – 69. <https://doi.org/10.1080/10106049.2016.1222637>
- Kato, S., & Huang, W. (2021). Land use management recommendations for reducing the risk of downstream flooding based on a land use change analysis and the concept of ecosystem-based disaster risk reduction. *Journal of Environmental Management*, *287*. <https://doi.org/10.1016/j.jenvman.2021.112341>
- Khadam, I. M., & Kaluarachchi, J. J. (2004). Use of soft information to describe the relative uncertainty of calibration data in hydrologic models. *Water Resources Research*, *40*(11), W1150501–W1150515. <https://doi.org/10.1029/2003WR002939>
- Knoben, W. J. M., Freer, J. E., & Woods, R. A. (2019). Technical note: Inherent benchmark or not? Comparing Nash-Sutcliffe and Kling-Gupta efficiency scores.

Hydrology and Earth System Sciences, 23(10), 4323–4331.
<https://doi.org/10.5194/hess-23-4323-2019>

Koltsida, E., Mamassis, N., & Kallioras, A. (2023). Hydrological modeling using the Soil and Water Assessment Tool in urban and peri-urban environments: the case of Kifisos experimental subbasin (Athens, Greece). *Hydrology and Earth System Sciences*, 27(4), 917–931. <https://doi.org/10.5194/hess-27-917-2023>

Koutný, L., Skoupil, J., & Veselý, D. (2014). Physical Characteristics Affecting the Infiltration of High Intensity Rainfall into a Soil Profile. In *Soil & Water Res* (Vol. 9, Issue 3).

Krishna, P. (2019). Evapotranspiration and agriculture-A review. *Agricultural Reviews*, 40, 1–11. <https://doi.org/10.18805/AG.R-1848>

Kumar, V., Sen, S., & Chauhan, P. (2021). Geo-morphometric prioritization of Aglar micro watershed in Lesser Himalaya using GIS approach. *Modeling Earth Systems and Environment*, 7(2), 1269–1279. <https://doi.org/10.1007/s40808-020-01000-8>

Kumari, M., Diksha, Kalita, P., Mishra, V. N., Choudhary, A., & Abdo, H. G. (2024). Rainfall-runoff modelling using GIS based SCS-CN method in umiam catchment region, Meghalaya, India. *Physics and Chemistry of the Earth*, 135. <https://doi.org/10.1016/j.pce.2024.103634>

Lagadec, L. R., Patrice, P., Braud, I., Chazelle, B., Moulin, L., Dehotin, J., Hauchard, E., & Breil, P. (2016). Description and evaluation of a surface runoff susceptibility mapping method. *Journal of Hydrology*, 541, 495–509. <https://doi.org/10.1016/j.jhydrol.2016.05.049>

Li, T. J., Wang, G. Q., He, L., & Luo-Song, D. J. (2014). Process-orientated hillslope soil erosion model for the Loess Plateau, China. *6th International Conference on Environmental Informatics, ISEIS 2007*. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84915749898&partnerID=40&md5=84ee8dc294211d4eb4eed1afbf62b1a5>

Li, Y., Wang, W., & Lu, H. (2018). Evaluation of the latest satellite-based precipitation products through pixel-point comparison and hydrological application over the mekong river basin. *International Geoscience and Remote Sensing Symposium (IGARSS)*, 2018-July, 3043 – 3046. <https://doi.org/10.1109/IGARSS.2018.8519448>

Lin, F., Chen, X., & Yao, H. (2017). Evaluating the use of Nash-Sutcliffe efficiency coefficient in goodness-of-fit measures for daily runoff simulation with SWAT.

Journal of Hydrologic Engineering, 22(11).
[https://doi.org/10.1061/\(ASCE\)HE.1943-5584.0001580](https://doi.org/10.1061/(ASCE)HE.1943-5584.0001580)

Linsley, R. K., & Franzini, J. B. (1971). *Water-Resources Engineering* (2nd ed.). McGRAW-HILL.

Liu, X.-T., Zheng, X.-Q., & Li, D.-B. (2009). Voronoi diagram-based research on spatial distribution characteristics of rural settlements and its affecting factors - A case study of Changping District, Beijing. *Journal of Ecology and Rural Environment*, 25(2), 30–33+93.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-67649550618&partnerID=40&md5=c8ef1e4ec0218d02f311a578a3147972>

Lourenço, S. D. N., & Rodrigues, D. M. M. (2015). The 2010 flash floods in Madeira Island: Characteristics and the role of soil water repellency in future events. *Geotechnical Engineering for Infrastructure and Development - Proceedings of the XVI European Conference on Soil Mechanics and Geotechnical Engineering, ECSMGE 2015*, 4, 1783 – 1788.
<https://www.scopus.com/inward/record.uri?eid=2-s2.0-84964466842&partnerID=40&md5=a0fe1b711d1671f140c3f40cd1af2130>

Lu, C., Ji, K., Wang, W., Zhang, Y., Ealotswe, T. K., Qin, W., Lu, J., Liu, B., & Shu, L. (2021). Estimation of the Interaction Between Groundwater and Surface Water Based on Flow Routing Using an Improved Nonlinear Muskingum-Cunge Method. *Water Resources Management*, 35(8), 2649–2666.
<https://doi.org/10.1007/s11269-021-02857-9>

Mahmoon, N. A., Ya'cob, N., & Yusof, A. L. (2015). Differences of Image Classification Techniques for Land Use and Land Cover Classification. *IEEE 11th International Colloquium on Signal Processing & Its Applications*, 90–94.
<https://doi.org/10.1109/CSPA.2015.7225624>

Mahmoud, A. S., Mezaal, M. R., Hameed, M. R., & Naje, A. S. (2022). A Framework for Improving Urban Land Cover Using Object and Pixel-Based Techniques via Remotely Sensed Data. *Nature Environment and Pollution Technology*, 21(5), 2189–2200. <https://doi.org/10.46488/NEPT.2022.v21i05.013>

Maidment, D. R., Olivera, F., Calver, A., Eatherall, A., & Fraczek, W. (1996). UNIT HYDROGRAPH DERIVED FROM A SPATIALLY DISTRIBUTED VELOCITY FIELD. *Hydrological Processes*, 10(6), 831–844.
[https://doi.org/https://doi.org/10.1002/\(SICI\)1099-1085\(199606\)10:6<831::AID-HYP374>3.0.CO;2-N](https://doi.org/https://doi.org/10.1002/(SICI)1099-1085(199606)10:6<831::AID-HYP374>3.0.CO;2-N)

- Marchi, L., & Borga, M. (2012). Flash floods in alpine basins. In *Management of Mountain Watersheds* (pp. 83 – 92). https://doi.org/10.1007/978-94-007-2476-1_7
- Marhaento, H., Booij, M. J., & Hoekstra, A. Y. (2018). Hydrological response to future land-use change and climate change in a tropical catchment. *Hydrological Sciences Journal*, 63(9), 1368–1385. <https://doi.org/10.1080/02626667.2018.1511054>
- Marhaento, H., Booij, M. J., Rientjes, T. H. M., & Hoekstra, A. Y. (2019). Sensitivity of Streamflow Characteristics to Different Spatial Land-Use Configurations in Tropical Catchment. *Journal of Water Resources Planning and Management*, 145(12). [https://doi.org/10.1061/\(asce\)wr.1943-5452.0001122](https://doi.org/10.1061/(asce)wr.1943-5452.0001122)
- Marhendi, T., & Munir, A. S. (2021). DAMPAK PERUBAHAN LANDUSE TERHADAP DEBIT PUNCAK BANJIR SUNGAI SERAYU HULU. *TECHNO*, 22(1), 13–26. <https://doi.org/10.30595/techno.v22i1.9009>
- Mas, J. F. (2004). Mapping land use/cover in a tropical coastal area using satellite sensor data, GIS and artificial neural networks. *Estuarine, Coastal and Shelf Science*, 59(2), 219–230. <https://doi.org/10.1016/j.ecss.2003.08.011>
- Mekuria, W., & Tegegne, D. (2023). Water harvesting. In M. J. Goss & M. Oliver (Eds.), *Encyclopedia of Soils in the Environment (Second Edition)* (Second Edition, pp. 593–607). Academic Press. <https://doi.org/https://doi.org/10.1016/B978-0-12-822974-3.00042-2>
- Mondal, I., Thakur, S., Ghosh, P., De, T. K., & Bandyopadhyay, J. (2019). Land use/land cover modeling of Sagar Island, India using remote sensing and GIS techniques. *Advances in Intelligent Systems and Computing*, 755, 771 – 785. https://doi.org/10.1007/978-981-13-1951-8_69
- Mulungu, D. M. M., & Mukama, E. (2023). Evaluation and modelling of accuracy of satellite-based CHIRPS rainfall data in Ruvu subbasin, Tanzania. *Modeling Earth Systems and Environment*, 9(1), 1287–1300. <https://doi.org/10.1007/s40808-022-01555-8>
- Muthoni, J., Shimelis, H., Mbiri, D. G., & Elmar, S.-G. (2021). Assessment of national performance trials of potatoes in mid-altitude regions of Kenya. *Journal of Agriculture and Crops*, 7(1), 7 – 13. <https://doi.org/10.32861/jac.71.7.13>
- Nyman, P., Rutherford, I. D., Lane, P. N. J., & Sheridan, G. J. (2019). Debris flows in southeast Australia linked to drought, wildfire, and the El Niño-Southern Oscillation. *Geology*, 47(5), 491–494. <https://doi.org/10.1130/G45939.1>

- Padmaja, G., & Giridhar, M. V. S. S. (2022). Utility of Geomatics in Land Use Land Cover Change Detection and Accuracy Analysis. In K. C. and J. D. and K. S. Rao Chintalacheruvu Madhusudana and Patra (Ed.), *Advanced Modelling and Innovations in Water Resources Engineering* (pp. 517–527). Springer Singapore.
- Pai, N., & Saraswat, D. (2013). Impact of Land Use and Land Cover Categorical Uncertainty on Swat Hydrologic Modeling. *Transactions of the ASABE*, 56(4), 1387–1397.
- Parise, M., & Cannon, S. H. (2012). Wildfire impacts on the processes that generate debris flows in burned watersheds. *Natural Hazards*, 61(1), 217 – 227. <https://doi.org/10.1007/s11069-011-9769-9>
- Park, G. A., Park, J. Y., Joh, H. K., Lee, J. W., Ahn, S. R., & Kim, S. J. (2014). Evaluation of mixed forest evapotranspiration and soil moisture using measured and swat simulated results in a hillslope watershed. *KSCCE Journal of Civil Engineering*, 18(1), 315–322. <https://doi.org/10.1007/s12205-014-0193-z>
- Pechlivanidis, I. G., Jackson, B. M., Mcintyre, N. R., & Wheeler, H. S. (2011). CATCHMENT SCALE HYDROLOGICAL MODELLING: A REVIEW OF MODEL TYPES, CALIBRATION APPROACHES AND UNCERTAINTY ANALYSIS METHODS IN THE CONTEXT OF RECENT DEVELOPMENTS IN TECHNOLOGY AND APPLICATIONS. *Global NEST Journal*, 13(3), 193–214.
- Peng, T., & Wang, S. jie. (2012). Effects of land use, land cover and rainfall regimes on the surface runoff and soil loss on karst slopes in southwest China. *Catena*, 90, 53–62. <https://doi.org/10.1016/j.catena.2011.11.001>
- Perumal, M., & Sahoo, B. (2010). Real-time flood forecasting by a hydrometric data-based technique. In *Natural and Anthropogenic Disasters: Vulnerability, Preparedness and Mitigation*. https://doi.org/10.1007/978-90-481-2498-5_9
- Prancevic, J. P., Lamb, M. P., McArdeall, B. W., Rickli, C., & Kirchner, J. W. (2020). Decreasing Landslide Erosion on Steeper Slopes in Soil-Mantled Landscapes. *Geophysical Research Letters*, 47(10). <https://doi.org/10.1029/2020GL087505>
- Prokešová, R., Horáčková, Š., & Snopková, Z. (2022). Surface runoff response to long-term land use changes: Spatial rearrangement of runoff-generating areas reveals a shift in flash flood drivers. *Science of the Total Environment*, 815. <https://doi.org/10.1016/j.scitotenv.2021.151591>
- Purwantara, S. (2020). THE CHARACTERISTICS OF INFILTRATION ON THE SOUTHERN FLANK OF MERAPI VOLCANIC PLAIN, YOGYAKARTA,

- INDONESIA. *International Journal of Geomate*, 19, 201–209.
<https://doi.org/10.21660/2020.74.52941>
- Quichimbo, E. A., Singer, M. B., Michaelides, K., Rosolem, R., MacLeod, D. A., Asfaw, D. T., & Cuthbert, M. O. (2023). Assessing the sensitivity of modelled water partitioning to global precipitation datasets in a data-scarce dryland region. *Hydrological Processes*, 37(12). <https://doi.org/10.1002/hyp.15047>
- Ramke, H.-G. (2018). 8.2 - Collection of Surface Runoff and Drainage of Landfill Top Cover Systems. In R. Cossu & R. Stegmann (Eds.), *Solid Waste Landfilling* (pp. 373–416). Elsevier. <https://doi.org/10.1016/B978-0-12-407721-8.00019-X>
- Rana, V. K., & Venkata Suryanarayana, T. M. (2020). Performance evaluation of MLE, RF and SVM classification algorithms for watershed scale land use/land cover mapping using sentinel 2 bands. *Remote Sensing Applications: Society and Environment*, 19. <https://doi.org/10.1016/j.rsase.2020.100351>
- Rinsema, J. G. (2014). *Comparison of rainfall runoff models for the Florentine Catchment*. <http://www.discovertasmania.com.au/attraction/lakemeadowbank>
- Ritter, D. F., Kochel, R. C., & Miller, J. R. (1995). *Process Geomorphology*. WCB/McGraw-Hill. <https://www.wou.edu/las/physci/taylor/geog522/rittchp5.pdf>
- Rodman, L. C., Jackson, J., Huizar III, R., & Meentemeyer, R. K. (2006). An association rule discovery system for geographic data. *International Geoscience and Remote Sensing Symposium (IGARSS)*, 3461 – 3464. <https://doi.org/10.1109/IGARSS.2006.892>
- Saha, S., Paul, G. C., & Hembram, T. K. (2020). Classification of terrain based on geo-environmental parameters and their relationship with land use/land cover in Bansloi River basin, Eastern India: RS-GIS approach. *Applied Geomatics*, 12(1), 55–71. <https://doi.org/10.1007/s12518-019-00277-4>
- Schumm, S. (1956). EVOLUTION OF DRAINAGE SYSTEMS AND SLOPES IN BADLANDS AT PERTH AMBOY, NEW JERSEY. *GSA Bulletin*, 65(5), 597–646. [https://doi.org/10.1130/0016-7606\(1956\)67\[597:EODSAS\]2.0.CO;2](https://doi.org/10.1130/0016-7606(1956)67[597:EODSAS]2.0.CO;2)
- Selase, A. E., Agyimpomaa, D. E. E., Selasi, D. D., & Hakii, D. M. N. (2015). Precipitation and Rainfall Types with Their Characteristic Features. *Journal of Natural Sciences Research*, 5, 89–92.

- Seyhan, E. (1977). *Fundamentals of Hydrology* (2nd ed.). Geografisch Instituut der Rijksuniversiteit te Utrecht, Universiteitcentrum “De Uithof.”
- Shang, X., Jiang, X., Jia, R., & Wei, C. (2019). Land use and climate change effects on surface runoff variations in the upper Heihe River basin. *Water (Switzerland)*, *11*(2). <https://doi.org/10.3390/w11020344>
- Shekar, P. R., & Mathew, A. (2022). Morphometric analysis for prioritizing sub-watersheds of Murredu River basin, Telangana State, India, using a geographical information system. *Journal of Engineering and Applied Science*, *69*(1). <https://doi.org/10.1186/s44147-022-00094-4>
- Shekar, P. R., & Mathew, A. (2024). Morphometric analysis of watersheds: A comprehensive review of data sources, quality, and geospatial techniques. *Watershed Ecology and the Environment*, *6*, 13–25. <https://doi.org/10.1016/j.wsee.2023.12.001>
- Sitterson, J., Knigghtes, C., Parmar, R., Wolfe, K., Mucche, M., & Avant, B. (2017). *An Overview of Rainfall-Runoff Model Types*. www.epa.gov/research
- Sood, A., Ghosh, S. K., & Upadhyay, P. (2021). Impact of Land Cover Change on Surface Runoff. In *Advances in Remote Sensing for Natural Resource Monitoring* (pp. 150–169). John Wiley & Sons, Ltd. <https://doi.org/https://doi.org/10.1002/9781119616016.ch10>
- Srivastava, S., Basche, A., Traylor, E., & Roy, T. (2023). The efficacy of conservation practices in reducing floods and improving water quality. In *Frontiers in Environmental Science* (Vol. 11). Frontiers Media S.A. <https://doi.org/10.3389/fenvs.2023.1136989>
- Steenhuis, T. S., Mukundan, R., & Tilahun, S. A. (2023). Overland flow. In M. J. Goss & M. Oliver (Eds.), *Encyclopedia of Soils in the Environment (Second Edition)* (Second Edition, pp. 287–293). Academic Press. <https://doi.org/https://doi.org/10.1016/B978-0-12-822974-3.00163-4>
- Suhaila, J., Deni, S. M., & Jemain, A. A. (2008). Detecting inhomogeneity of rainfall series in Peninsular Malaysia. *Asia-Pacific Journal of Atmospheric Sciences*, *44*(4), 369 – 380. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-57349141962&partnerID=40&md5=0539d8d47575a037eb43f87f7bfe429c>
- Sukristiyanti, S., Maria, R., & Lestiana, H. (2018). Watershed-based Morphometric Analysis: A Review. *IOP Conference Series: Earth and Environmental Science*, *118*(1). <https://doi.org/10.1088/1755-1315/118/1/012028>

- Tan, J., Zuo, J., Xie, X., Ding, M., Xu, Z., & Zhou, F. (2021). MLAs land cover mapping performance across varying geomorphology with Landsat OLI-8 and minimum human intervention. *Ecological Informatics*, 61. <https://doi.org/10.1016/j.ecoinf.2021.101227>
- Tasdighi, A., Arabi, M., & Harmel, D. (2018). A probabilistic appraisal of rainfall-runoff modeling approaches within SWAT in mixed land use watersheds. *Journal of Hydrology*, 564, 476–489. <https://doi.org/10.1016/j.jhydrol.2018.07.035>
- Thiruchelva, S. R., Chandran, S., Kumar, V., & Chandramohan, K. (2024). Assessment of land use and land cover dynamics and its impact in direct runoff generation estimation using SCS CN method. *Acta Geophysica*. <https://doi.org/10.1007/s11600-024-01315-5>
- Tillery, A. C., & Rengers, F. K. (2020). Controls on debris-flow initiation on burned and unburned hillslopes during an exceptional rainstorm in southern New Mexico, USA. *Earth Surface Processes and Landforms*, 45(4), 1051–1066. <https://doi.org/10.1002/esp.4761>
- Tran, H., Tran, T., & Kervyn, M. (2015). Dynamics of land cover/land use changes in the Mekong Delta, 1973-2011: A Remote sensing analysis of the Tran Van Thoi District, Ca Mau Province, Vietnam. *Remote Sensing*, 7(3), 2899–2925. <https://doi.org/10.3390/rs70302899>
- Triatmodjo, B. (2010). *Hidrologi Terapan* (2nd ed.). Beta Offset.
- Ur Rahman, K., Shang, S., Shahid, M., & Wen, Y. (2020). Hydrological evaluation of merged satellite precipitation datasets for streamflow simulation using SWAT: A case study of Potohar Plateau, Pakistan. *Journal of Hydrology*, 587, 125040. <https://doi.org/10.1016/j.jhydrol.2020.125040>
- van Vliet, J., Hagen-Zanker, A., Hurkens, J., & van Delden, H. (2013). A fuzzy set approach to assess the predictive accuracy of land use simulations. *Ecological Modelling*, 261–262, 32–42. <https://doi.org/10.1016/j.ecolmodel.2013.03.019>
- Velásquez, N., Hoyos, C. D., Vélez, J. I., & Zapata, E. (2020). Reconstructing the 2015 Salgar flash flood using radar retrievals and a conceptual modeling framework in an ungauged basin. *Hydrology and Earth System Sciences*, 24(3), 1367–1392. <https://doi.org/10.5194/hess-24-1367-2020>
- Villamil, J. L., Perea Ardila, M. A., & Carvajal, J. L. (2020). Vegetation indices for land cover classification: River combeima basin, Colombia; [Índices de vegetación: Para la clasificación de coberturas del terreno: Cuenca del río Combeima, Colombia]. *Revista Geografica Venezolana*, 61(2), 396 – 411.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85116863039&partnerID=40&md5=a32859b6fb9d02169942d27faa419792>

- Vuttipittayamongkol, P., Elyan, E., & Petrovski, A. (2021). On the class overlap problem in imbalanced data classification. *Knowledge-Based Systems*, 212, 106631. <https://doi.org/10.1016/j.knosys.2020.106631>
- Waheed, A., Jamal, M. H., Javed, M. F., & Idran Muhammad, K. (2024). A CMIP6 multi-model based analysis of potential climate change effects on watershed runoff using SWAT model: A case study of kunhar river basin, Pakistan. *Heliyon*, 10(8). <https://doi.org/10.1016/j.heliyon.2024.e28951>
- Wang, C., Zhang, Z., Zhang, J., Tao, F., Chen, Y., & Ding, H. (2018). The effect of terrain factors on rice production: A case study in Hunan Province; [湖南省地形因素对水稻生产的影响]. *Dili Xuebao/Acta Geographica Sinica*, 73(9), 1792 – 1808. <https://doi.org/10.11821/dlxb201809014>
- Wang, J., Zhang, X., & Rodman, K. (2021). Land cover composition, climate, and topography drive land surface phenology in a recently burned landscape: An application of machine learning in phenological modeling. *Agricultural and Forest Meteorology*, 304–305, 108432. <https://doi.org/10.1016/j.agrformet.2021.108432>
- Wang, X., Wen, H., Gui, B., Liu, Z., & Yang, L. (2025). Urban terrain, mountain landscape, and housing price: A heterogeneous investigation of the amenity effects in a mountainous city (Guiyang) from the vertical dimension. *Applied Geography*, 174, 103479. <https://doi.org/10.1016/j.apgeog.2024.103479>
- Wang, Y., Hu, Z., & Zhang, Y. (2021). Delineating the future boundaries of urban development using the FLUS Model: A Case Study of Zhaoyuan City, China. *IOP Conference Series: Earth and Environmental Science*, 783(1). <https://doi.org/10.1088/1755-1315/783/1/012088>
- Wang, Y., Zhang, J., Liu, D., Yang, W., & Zhang, W. (2018). Accuracy assessment of GlobeLand30 2010 land cover over China based on geographically and categorically stratified validation sample data. *Remote Sensing*, 10(8). <https://doi.org/10.3390/rs10081213>
- Waske, B., Schiefer, S., & Braun, M. (2006). Random feature selection for decision tree classification of multi-temporal SAR data. *International Geoscience and Remote Sensing Symposium (IGARSS)*, 168 – 171. <https://doi.org/10.1109/IGARSS.2006.48>

- Wibowo, N. A., Sangkawati, S., & Supari. (2024). Impact of El Nino and La Nina Climate Anomalies on Precipitation and Water Availability in Upper Bogowonto River Basin 2003–2022. *Lecture Notes in Civil Engineering*, 466, 785 – 797. https://doi.org/10.1007/978-981-97-0751-5_68
- Xi, W., Du, S., & Du, S. (2022). Multi-temporal Cultivated Land Cover Extraction and Change Analysis: A Spatiotemporal Context Method Combining Remote Sensing and Spatial Statistics. *Journal of Geo-Information Science*, 24(2), 310–325. <https://doi.org/10.12082/dqxkx.2022.210034>
- Xie, M.-J., & Shi, L. (2012). Influence of vegetation around rural housing on natural ventilation in Hunan province. *Hunan Daxue Xuebao/Journal of Hunan University Natural Sciences*, 39(7), 20 – 24. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84865821701&partnerID=40&md5=3e3d5f0838e2ab872d04d5fa937228d5>
- Xu, W.-N., Wang, P.-X., Han, P., Yan, T.-L., & Zhang, S.-Y. (2011). Application of Kappa coefficient to accuracy assessments of drought forecasting model: A case study of Guanzhong Plain. *Journal of Natural Disasters*, 20(6), 81 – 86. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84860850365&partnerID=40&md5=00c11e4bdbfeddfa6ea1202c5f97a8fd>
- Yang, X., Chen, L., Li, Y., Xi, W., & Chen, L. (2015). Rule-based land use/land cover classification in coastal areas using seasonal remote sensing imagery: a case study from Lianyungang City, China. *Environmental Monitoring and Assessment*, 187(7). <https://doi.org/10.1007/s10661-015-4667-3>
- Yetekar, R. S., & Kurzekar, A. S. (2022, March 25). Parametric study of responses of RCC building on sloping ground for response reduction factor with vertical discontinuity – A review. *INTERNATIONAL CONFERENCE ON BIOMEDICAL ENGINEERING AND COMPUTING TECHNOLOGIES*.
- Yin, J., Gentine, P., Zhou, S., Sullivan, S. C., Wang, R., Zhang, Y., & Guo, S. (2018). Large increase in global storm runoff extremes driven by climate and anthropogenic changes. *Nature Communications*, 9(1). <https://doi.org/10.1038/s41467-018-06765-2>
- Youssef, A. M., Sefry, S. A., Pradhan, B., & Alfadail, E. A. (2016). Analysis on causes of flash flood in Jeddah city (Kingdom of Saudi Arabia) of 2009 and 2011 using multi-sensor remote sensing data and GIS. *Geomatics, Natural Hazards and Risk*, 7(3), 1018–1042. <https://doi.org/10.1080/19475705.2015.1012750>

- Yu, Y., Zhu, R., Ma, D., Liu, D., Liu, Y., Gao, Z., Yin, M., Bandala, E. R., & Rodrigo-Comino, J. (2022). Multiple surface runoff and soil loss responses by sandstone morphologies to land-use and precipitation regimes changes in the Loess Plateau, China. *Catena*, 217. <https://doi.org/10.1016/j.catena.2022.106477>
- Zhang, J., Zhu, W., Zhu, L., Cui, Y., He, S., & Ren, H. (2019). Topographical relief characteristics and its impact on population and economy: A case study of the mountainous area in western Henan, China. *Journal of Geographical Sciences*, 29(4), 598–612. <https://doi.org/10.1007/s11442-019-1617-y>
- Zhang, W., Hui, Y., Guo, Y., Li, Y., & Xiu, M. (2022). Building Remote Sensing Image Determination Based on Precision Analysis. *Proceedings - 2022 International Conference on Big Data, Information and Computer Network, BDICN 2022*, 602 – 605. <https://doi.org/10.1109/BDICN55575.2022.00116>
- Zou, M., Kang, S., Niu, J., & Lu, H. (2020). Untangling the effects of future climate change and human activity on evapotranspiration in the Heihe agricultural region, Northwest China. *Journal of Hydrology*, 585. <https://doi.org/10.1016/j.jhydrol.2019.124323>