

DAFTAR PUSTAKA

- Aggarwal, S. (2004). Principles of Remote Sensing. *Satellite Remote Sensing and GIS Applications in Agricultural Meteorology*, 23, 23-28.
- Ali, S. A., & Hagos, H. (2016). Estimation of soil erosion using USLE and GIS in Awassa Catchment, Rift valley, Central Ethiopia. *Geoderma Regional*, 7(2), 159-166.
- Altaf, Sadaff., Meraj, Gowhar., Ramshoo, Shakil Ahmad. (2014). Morphometry and land cover based multi-criteria analysis for assessing the soil erosion susceptibility of the western Himalayan watershed. *Environmental Monitoring and Assessment*, 186, 8391–8412. Retrieved from <https://doi.org/10.1007/s10661-014-4012-2>
- Andersen, D. (1970). Effects of urban development of floods in Northern Virginia. *US Geological Survey Water Supply Paper*.
- Arini, D. I. D., Prasetyo, L. B., & Rusdiana, O. (2007). Aplikasi Sistem Informasi Geografis (Sig) dan Penginderaan Jauh untuk Model Hidrologi Answers dalam Memprediksi Erosi dan Sedimentasi Studi Kasus: DTA Cipopokol Sub DAS Cisadane Hulu Kabupaten Bogor. *Media Konservasi*, 12(2).
- Arsyad, S. (2010). *Konservasi Tanah dan Air*. Bogor: IPB Press.
- Asdak, C. (2007). *Hidrologi dann Pengelolaan Daerah Aliran Sungai*. Yogyakarta, Yogyakarta, Indonesia: Gadjah Mada University Press.
- Asdak, C. (2020). *Hidrologi dan Pengelolaan Daerah Aliran Sungai*. Yogyakarta: Gadjah Mada University Press.
- Aslami, Farnoosh., & Ghorbani, Ardavan. (2018). Object-based Land-use/Land-cover Change Detection Using Landsat Imagery: A Case Sudy of Ardabil, Namin, and Nir Countries in Northwest Iran. *Emvironmental Monitoring Assessment*, 190, 376.
- Badan Pusat Statistika. (2015). *Kintamani dalam Angka 2015*. Bangli: BPS Kabupaten Bangli.
- Balcik, F. B., & Kuzucu, A. K. (2016). Determination of land cover/land use using spot 7 data with supervised classification methods. *he International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences*, 143, 143.
- Bathurst, J. C., Birkinshaw, S. J., Cisneros, F., Fallas, J., Iroumé, A., Iturraspe, R., ... & Sarandón, R. (2011). Forest impact on floods due to extreme rainfall and snowmelt in four Latin American environments 2: Model analysis. *Journal of Hydrology*, 400(3-4), 292-304.
- Borrelli, P., Robinson, D.A., Fleischer, L.R., Lugato, E., Ballabio, C., Alewell, C., Meusburger, K., Modugno, S., Schütt, B., Ferro, V., Bagarello, V., Oost, K., Montanarella, L., Panagos, P. (2013). An assessment of the global impact of 21st century land use change on soil erosion. *Nature Communication*, 8. doi: 10.1038/s41467-017-02142-7

- Bosch, J.M., Hewlet, J.D. (1982). A review of catchment experiments to determine the effect of vegetation changes on water yield and evapotranspiration. *Journal of Hydrology*, 55(1-4), 3-23. Retrieved from [https://doi.org/10.1016/0022-1694\(82\)90117-2](https://doi.org/10.1016/0022-1694(82)90117-2)
- Balai Pengelolaan Daerah Aliran Sungai. (2021, Maret 5). *SWP DAS Blingkang Anyar*. Retrieved from Balai Pengelolaan Daerah Aliran Sungai dan Hutan Lindung Unda Anyar Kementerian Lingkungan Hidup dan Kehutanan Direktorat Jenderal Pengendalian Daerah Aliran Sungai dan Hutan Lindung: <http://www.bpdas-undaanyar.net/data-informasi/info-das/swp-das-blingkang-anyar/>
- Bruijnzeel, L. (2004). Hydrological functions of tropical forests: not seeing the soil for the trees? *Agriculture, Ecosystems & Environment*, 104(1), 185-228. Retrieved from <https://doi.org/10.1016/j.agee.2004.01.015>
- Butt, M.J., Waqas, A., Mahmood, R. (2010). The Combined Effect of Vegetation and Soil Erosion in the Water Resource Management. *Water Resour Manage*, 24, 3701-3714. doi:10.1007/s11269-010-9627-7
- Caesar, A., Robles, B., Ruiz-Lama, A. (2002). Land Use Mapping and Change Detection in The Coastal Zone of Northwest Mexico Using Remote Sensing Techniques. *Journal of Coastal Research*, 18(3), 514-522. Retrieved from <https://www.jstor.org/stable/4299098>
- Campbell, J.B., Wynne, R.H. (2011). *Introduction to Remote Sensing Fifth Edition*. New York: The Guilford Press.
- Carter, W. (1961). Magnitude and frequency of floods in suburban areas. *US Geological Survey Professional Paper*.
- Chen, Chi Hau., Peter Ho, Pei-Gee. (2008). Statistical Pattern Recognition in Remote Sensing. *Pattern Recognition*, 41, 2731-2741. doi:10.1016/j.patcog.2008.04.013
- Chen, J., Lu, M., Chen, X., Chen, J., Chen, L. (2013). A spectral gradient difference based approach for land cover change detection. *ISPRS journal of photogrammetry and remote sensin*, 85, 1-12.
- Civco, D. L. (2002). A Comparison Of Land Use and Land Cover Change Detection Methods. *ASPRS-ACSM Annual Conference and FIG XXII Congress*.
- Congalton, R.G., Green, K. (2009). *Assessing the Accuracy of Remotely Sensed Data: Principles and Practices, 2nd edition*. Abingdon, UK: Taylor and Francis Group.
- Coppin, P., Jonckheere, I., Nackaerts, K., dan Muys, B. (2004). Digital change detection methods in ecosystem monitoring: A review. *International Journal of Remote Sensing*, 25, 1565-1577.
- Coppin, P.R., Bauer, M.E. (1996). Digital change detection in forest ecosystems with remote sensing imagery. *Remote Sensing Reviews*, 13(3-4), 207-234. Retrieved from <https://doi.org/10.1080/02757259609532305>

- Coskun, H.G., Alganci, U., Usta, G. (2008). Analysis of Land Use Change and Urbanization in the Kucukcekmece Water Basin (Istanbul, Turkey) with Temporal Satellite Data using Remote Sensing and GIS. *MDPI Journal Sensor*, 8, 7213-7223. doi:10.3390/s8117213
- Cracknell, A.P., Hayes, L. (2007). *Introduction to Remote Sensing Second Edition*. New York: CRC Press.
- Danoedoro, P. (2012). *Pengantar Penginderaan Jauh Digital*. Yogyakarta: ANDI Yogyakarta.
- Danoedoro, P. (2015). Pengaruh Jumlah dan Metode Pengambilan Titik Sampel Pengujian Terhadap Tingkat Akurasi Klasifikasi Citra Digital Penginderaan Jauh. *Prosiding. Simposium Sains Geoinformasi ke-4*, (p. 27).
- Danoedoro, P., Ananda, I.N., Kartika, C.S.D., Umela, A.F., Indayani, A.B. (2020). Testing a Detailed Classification Scheme for Land-cover/ Land-use Mapping of Typical Indonesian Landscapes: Case Study of Sarolangun, Jambi and Salatiga, Central Java. *Indonesian Journal of Geography*, 52(3), 327-340. Retrieved from <https://doi.org/10.22146/ijg.50080>
- Darmawan, K. H. (2017). Analisis Tingkat Kerawanan Banjir di Kabupaten Sampang Menggunakan Metode Overlay dengan Scoring Berbasis Sistem Informasi Geografis. *Jurnal Geodesi Undip*, 6(1).
- Deng, L., Kim, D.G., Huang, C., Liu, Q., Cheng, M., Sangguan, Z., Peng, C. (2019). Land-use changes driven by 'Grain for Green' program reduced carbon loss induced by soil erosion on the Loess Plateau of China. *Global and Planetary Change*, 177, 101-115.
- Departemen Kehutanan. (1998). *Pedoman Penyusunan Rencana Teknik Rehabilitasi Teknik Lapangan dan Konservasi Tanah Daerah Aliran Sungai*. Jakarta: Departemen Kehutanan.
- Devatha, C. P., Deshpande, V., & Renukaprasad, M. S. (2015). Estimation of soil loss using USLE model for Kulhan Watershed, Chattisgarh-A case study. *Aquatic Procedia*, 4, 1429-1436.
- Diallo, Y. H. (2009). Applications of Remote Sensing in Land Use/Land Cover Change Detection in Puer and Simao Counties, Yunnan Province. *Journal of American Science*, 5(4), 157-166.
- Elvidge, C.D., & Chen, Z. (1995). Comparison of broad-band and narrow-band red and near-infrared vegetation indices. *Remote sensing of environment*, 54(1), 38-48. Retrieved from [https://doi.org/10.1016/0034-4257\(95\)00132-K](https://doi.org/10.1016/0034-4257(95)00132-K)
- Fang, N. F., Wang, L., & Shi, Z. H. (2017). Runoff and soil erosion of field plots in a subtropical mountainous region of China. *Journal of Hydrology*, 552, 387-395.
- Fischer, W. (1975). History of Remote Sensing Chapter 2. In R. Reeves, *Manual of Remote Sensing* (pp. 27-50). American Society of Photogrammetry.

- Fisher, J.R.B., Acosta, E.A., Dennedy-Frank, P.J., Kroeger, T., Boucher, T.M. (2018). Impact of satellite imagery spatial resolution on land use classification accuracy and modeled water quality. *Remote Sensing in Ecology and Conservation*, 4(2). doi:10.1002/rse2.61
- Foody, G. M. (2020). Explaining the unsuitability of the kappa coefficient in the assessment and comparison of the accuracy of thematic maps obtained by image classification. *Remote Sensing of Environment*, 239.
- Foster, G. (1982). *Modeling the Erosion Process "Hydrologic Modeling of Small Watersheds"*. Michigan: American Society of Agricultural Engineers, St. Joseph.
- Gallart, F., Latron, J., Llorens, P., Rabadà, D. (1997). Hydrological functioning of Mediterranean mountain basins in Vallcebre, Catalonia: some challenges for hydrological modelling. *Hydrological Processes*, 11, 1263-1272. Retrieved from [https://doi.org/10.1002/\(SICI\)1099-1085\(199707\)11:9<1263::AID-HYP556>3.0.CO;2-W](https://doi.org/10.1002/(SICI)1099-1085(199707)11:9<1263::AID-HYP556>3.0.CO;2-W)
- Ghimire, C.P., Brujinzeel, L.A., Lubczynski, M.W., Boneli, M. (2014). Negative trade-off between changes in vegetation water use and infiltration recovery after reforestation degraded pasture land in the Nepalese Lesser Himalaya. *Hydrology and Earth System Science*, 11, 3437–3479. doi:10.5194/hessd-11-3437-2014
- Giri, C. P. (2012). *Remote Sensing of Land Use and Land Cover Principles and Applications*. Indiana: CRC Press Taylor & Francis Group.
- Gyssels, G., Poesen, J., Bochet, E., Li, Y. (2005). Impact of plant roots on the resistance of soils to erosion by water: a review. *Progress in Physical Geography: Earth and Environment*, 29, 189-217.
- Haan, C.T., Barfield, B.J., Hayes, J.C. (1994). *Design Hydrology and Sedimentology for Small Catchments*. United States of America: Academic Press Inc.
- Hakim, M. L. (2010). Dampak Alih Fungsi Lahan Terhadap Keberlanjutan Suplai Air di Waduk Sutami, Malang, Jawa Timur. *Widyaiset*, 13(3), 27-34.
- Hardiyatmo, H.C. (2006). *Penanganan Tanah Longsor dan Erosi*. Yogyakarta: Gadjah Mada University Press.
- Heiselberg, Peder dan Heiselberg, Henning. (2017). Ship-Iceberg Discrimination in Sentinel-2 Multispectral Imagery by Supervised Classification. *Remote Sensing*, 9(1156). doi:10.3390/rs9111156
- Kementerian Lingkungan Hidup. (2014). *Gerakan Penyelamatan Danau (GERMADAN) Batur*. Jakarta: Kementerian Lingkungan Hidup.
- Hu, J., Lü, Y., Fu, B., Comber, A. J., & Harris, P. (2017). Quantifying the effect of ecological restoration on runoff and sediment yields: a meta-analysis for the Loess Plateau of China. *Progress in Physical Geography*, 41(6), 753-7754.
- Irwansyah, E. (2013). *Sistem Informasi Geografis Prinsip Dasar dan Pengembangan Aplikasi*. Yogyakarta: Digibooks.

- Jain, M.K., Kothiyari UC., Ranga Raju, K.G. (2005). Geographic Information System Based Distributed Model for Soil Erosion and Rate of Sediment Outflow from Catchments. *Journal of Hydraulic Engineering*, 131(9), 755-769.
- Jain, M.K., Kothiyari, U.C. (2000). Estimation of Soil Erosion and Sediment Yield using GIS. *Hydrological Sciences Journal*, 45(5), 771-786. Retrieved from <http://dx.doi.org/10.1080/02626660009492376>
- Jensen, J. (2003). *Remote Sensing of Environment. An Earth Resource Perspective (First Indian Reprint)*. New Delhi: Pearson Education (Singapore) Pte Ltd.
- Johansen, B., & Tømmervik, H. (2014). The relationship between phytomass, NDVI and vegetation communities on Svalbard. *International Journal of Applied Earth Observation and Geoinformation*, 27, 20-30. Retrieved from <https://doi.org/10.1016/j.jag.2013.07.001>
- Kapp, J.F., Fijen, A.P.M., Van Zyl, F. (1995). Towards a water management strategy for an environmentally sensitive and popular tourist region. *Water Science and Technology*, 32(5-6), 245-254. doi:10.1016/0273-1223(95)00669-9
- Laili, Silmia., Cahyono, B.E., Nugroho, A.T. (2020). Analisis Kualitas Air di Danau Batur Menggunakan Landsat-8 OLI/TIRS Multitemporal. *Elipsoida Jurnal Geodesi dan Geomatika*, 3(1), 71-79.
- Lillesand, T.M., Kiefer, R.W. (1979). *Remote Sensing and Image Interpretation*. New York: John Wiley and Sons.
- Lillesand, T.M., Kiefer, R.W., Chipman, J. W. (2015). *Remote Sensing and Image Interpretation*. US America: WILEY.
- Lindgren, D. (1985). *Land Use Planning and Remote Sensing*. Dordrecht: Martinus Nijhoff Publishers.
- Liu, Chang., Sun, Peng-Sen., Liu, Shi-Rong. (2016). A Review of Plant Spectral Reflectance Response to Water Physiological Changes. *Chinese Journal of Plant Ecology*, 40, 80-91. doi:10.17521/cjpe.2015.0267
- Liu, Jian Guo dan Mason, Philippa J. (2016). *Image Processing and GIS for Remote Sensing Techniques and Applications*. West Sussex: John Wiley & Sons, Ltd.
- Liu, Y. F., Dunkerley, D., López-Vicente, M., Shi, Z. H., & Wu, G. L. (2020). Trade-off between surface runoff and soil erosion during the implementation of ecological restoration programs in semiarid regions: A meta-analysis. *Science of the Total Environment*, 712.
- Longley, P.A., Goodchild, M.F., Maguider, D.J., Rhind, D.W. (2005). *Geographical Information Systems and Science 2nd Edition*. England: John Wiley & Sons.
- LÓPEZ-MORENO, J. I., Beguería, S., & García-Ruiz, J. M. (2006). Trends in high flows in the central Spanish Pyrenees: response to climatic factors or to land-use change? *Hydrological Sciences Journal*, 51(6), 1039-1050.

- Lu, D., Mausel, P., Brondizio, E., and Moran, E. (2004). Change detection techniques. *International Journal of Remote Sensing*, 20, 2365-2407.
- Lyon, J. G. (2003). *GIS for Water Resources and Watershed Management*. London: Taylor & Francis.
- Martinuzzi, S. G. (2007). Land development, land use, and urban sprawl in Puerto Rico integrating remote sensing and population census data. *Landscape and Urban Planning*, 79, 288-297. doi:10.1016/j.landurbplan.2006.02.014
- McFeeters, S. (1996). The Use of The Normalized Difference Water Index (NDWI) in The Delineation of Open Water Features. *International Journal of Remote Sensing*, 17(12), 1425-1432. doi:10.1080/01431169608948714
- Meijerink, A. M. (1970). *Photo-Interpretation in Hydrology, A Geomorphological Approach*. International Institute for Aerial Survey and Earth Sciences.
- Mendoza, M.E., Granados, E.L., Geneletti, D., Pérez-Salicrú, D.R. (2011). Analysing land cover and land use change processes at watershed level: A multitemporal study in the Lake Cuitzeo Watershed, Mexico (1975-2003). *Applied Geography*, 31(1), 237-250. Retrieved from <https://doi.org/10.1016/j.apgeog.2010.05.010>
- Meyer, L.D., Wischmeier, W.H. (1969). Mathematical Simulation of the Process of Soil Erosion by Water. *Transactions of the American Society of Agricultural Engineers*, 12(6), 754-758. Retrieved from <http://dx.doi.org/10.13031/2013.38945>
- Moscip, A.L., Montgomery, D.R. (1997). Urbanization flood, frequency and salmon abundance in Puget Lowland Streams. *Journal of the American Water Resources Association*, 33(6), 1289-1297.
- Mutua, B.M., Klik, A., Loiskandl, W. (2006). Modelling Soil Erosion and Sediment Yield at a Catchment Scale: The Case of Masinga Catchment, Kenya. *Land Degradation & Development*, 17(5), 557-570. Retrieved from <http://dx.doi.org/10.1002/ldr.753>
- Ni, J.-R., Li, X.-X., Borthwick, A.G.L. (2008). Soil Erosion Assessment Based on Minimum Polygons in The Yellow River Basin, China. *Geomorphology*, 93, 233-252. Retrieved from <https://doi.org/10.1016/j.geomorph.2007.02.015>.
- Patil, R. (2018). Spatial Techniques for Soil Erosion Estimation Remote Sensing and GIS Approach. Switzerland: SpringerBriefs in GIS. Retrieved from <https://doi.org/10.1007/978-3-319-74286-1>
- Pontius Jr, Robert., and Marco, Millones. (2011). Death to Kappa: Birth of Quantity Disagreement and Allocation Disagreement for Accuracy Assessment. *International Journal of Remote Sensing*, 32(15), 4407-4429.
- Pusat Pengendalian Pembangunan Ekoregion Bali Nusra. (2018). *Rencana Pengelolaan Sumber Daya Air dan Lahan di Danau Batur Serta Daerah Tangkapan Airnya Berbasis Daya Dukung Lingkungan Hidup*. Denpasar: Pusat Pengendalian Pembangunan Ekoregion Bali dan Nusa Tenggara.

- Qadir, Junaid., Singh, Perminder. (2019). Land use/cover Mapping and Asseing The Impact Of Solid Waste on Water Quality of Dal Lake Catchment Using Remote Sensing and GIS (Srinagar, India). *Springer Nature Journal Applied Sciences*. Retrieved from <https://doi.org/10.1007/s42452-018-0027-6>
- Raharjo, P. D. (2009). Perubahan Penggunaan Lahan DAS Kreo Terhadap Debit Puncak dengan Aplikasi Penginderaan Jauh. *Jurnal Riset Geologi dan Pertambangan*, 19(2), 69-84.
- Raharjo, P. D. (2014). Aplikasi Penginderaan Jauh Multi-temporal Untuk Kajian Limpasan Permukaan Akibat Perubahan Penutup Lahan, Kasus Di DAS Grompol, Jawa Tengah. *Tesis*. Yogyakarta: Pascasarjana Program Studi Penginderaan Jauh Fakultas Geografi Universitas Gadjah Mada.
- Rahman, A., Kumar, S., Fazal, S., Siddiqui, M. (2012). Assessment of Land use/land cover Change in the North-West District of Delhi Using Remote Sensing and GIS Techniques. *Journal of the Indian Society of Remote Sensing*, 40, 689-697.
- Rawat, J. S., & Kumar, M. (2015). Monitoring land use/cover change using remote sensing and GIS techniques: A case study of Hawalbagh block, district Almora, Uttarakhand, India. *The Egyptian Journal of Remote Sensing and Space Science*, 18(1), 77-84.
- Renard, K.G., Foster, G.R., McCool, D.K., Yoder, D.C. (1997). *Predicting Soil Erosion by Water: a Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE)*. Washington DC: Agriculture Handbook No. 703. USDA.
- Rwanga, S. S., & Ndambuki, J. M. (2017). Accuracy Assessment of Land Use/Land Cover Classification Using Remote Sensing and GIS. *International Journal of Geosciences*, 8(04), 611.
- Saiya, H. G., Dibyosaputro, S., & Santosa, S. H. B. (2016). USLE estimation for potential erosion at Wae Heru watershed and Wae Tonahitu watershed, Ambon Island, Indonesia. *The Indonesian Journal of Geography*, 48(2), 191.
- Salim, A.G.m Dharmawan, I.W.S., Narendra, B.D. (2019). Pengaruh Perubahan Luas Tutupann Lahan Hutan Terhadap Karakteristik Hidrologi DAS Citarum Hulu. *Jurnal Ilmu Lingkungan*, 17(2), 333-340.
- Sardari, M.R.A., Bazrafshan, O., Panagopoulos, T., Sardooi, E.R. (2019). Modeling the Impact of Climate Change and Land Use Change Scenarios on Soil Erosion at the Minab Dam Watershed. *Sustainability*, 11(12). Retrieved from ; <https://doi.org/10.3390/su11123353>
- Schilling, K. E., and Libra, R. D. (2003). Increased baseflow in Iowa over the second half of the 20th century. *J. Am. Water Resour. Assoc*, 39, 851-860. doi:10.1111/j.1752-1688.2003.tb04410.x
- Sena, N. C., Veloso, G.V., Fernandes-Filho, E.I., Francelino, M.R., Schaefer, C.E.R.G.R. (2020). Analysis of terrain attributes in different spatial resolutions for digital soil mapping application in southeastern Brazil. *Geoderma Regional*, 21.

- Sharma, A., Liu, X., Yang, X., & Shi, D. (2017). A patch-based convolutional neural network for remote sensing image classification. *Neural Networks*, 95, 19-28.
- Sharma, A., Tiwari, K.N., Bhadoria, P. (2011). . Effect of land use land cover change on soil erosion potential in an agricultural watershed. *Environmental Monitoring and Assessment*, 173, 789-801. Retrieved from <https://doi.org/10.1007/s10661-010-1423-6>
- Siahaya, W. A. (2016). Pengaruh Perubahan Penutup Lahan Terhadap Perubahan Penutup Bentik Dasar Perairan Pesisir Pulau Kecil Berdasarkan Analisis Citra Satelit Resolusi Menengah (Kasus Empat Belas DAS yang Bermuara di Teluk Ambon). *Disertasi*. Yogyakarta: Program Pascasarjana S3 Fakultas Geografi Universitas Gadjah Mada.
- Singh, A. (1989). Digital Change Detection Techniques Using Remotely-Sensed Data. *International Journal Remote Sensing*, 10(6), 989-1003. doi:10.1080/01431168908903939
- Sisodia, P. S., Tiwari, V., & Kumar, A. (2014). Analysis of supervised maximum likelihood classification for remote sensing image. In *International conference on recent advances and innovations in engineering (ICRAIE-2014)* (pp. 1-4). India: IEEE.
- Sitepu, F., Selintung, M., Harianto, T. (2017). Pengaruh Curah Hujan dan Kemiringan Lereng Terhadap Erosi yang Berpotensi Longsor. *Jurnal Penelitin Enjiniring*, 21(1), 23-27.
- Soerwono. (2000). *Hidrologi Operasional Jilid Kesatu*. Bandung: Citra Aditya Bakti.
- Somantri, L. (2008). Pemanfaatan Teknik Penginderaan Jauh untuk Mengidentifikasi Kerentanan dan Risiko Banjir. *Jurnal Geografi GEA*, 8(2). doi:10.17509/gea.v8i2.1697.g1148
- Somantri, L. (2009). Teknologi Penginderaan Jauh (Remote Sensing). *Universitas Pendidikan Indonesia*.
- Sood, V., Gusain, H. S., Gupta, S., & Singh, S. (2021). Topographically derived subpixel-based change detection for monitoring changes over rugged terrain Himalayas using AWiFS data. *Journal Mountain Science*, 18(1), 126-140.
- Sriwongsitanon, N., & Taesombat, W. (2011). Effects of land cover on runoff coefficient. *Journal of Hydrology*. *Journal of Hydrology*, 410(3-4), 226-238.
- Stasiun Klimatologi Jembrana Badan Meteorologi Klimatologi dan Geofisika. (2021). Data Curah Hujan Bulanan Kecamatan Kintamani Tahun 2015-2021. Bali.
- Sun, W., Shao, Q., Liu, J., Zhai, J. (2014). Assessing the effects of land use and topography on soil erosion on the Loess Plateau in China. *CATENA*, 121, 151-163. Retrieved from <https://doi.org/10.1016/j.catena.2014.05.009>
- Sutanto. (1986). *Penginderaan Jauh Jilid 1*. Yogyakarta: Gadjah Mada Universiti Press.
- Suwargana, N. (2013). Resolusi Spasial, Temporal dan Spektral Pada Citra Satelit Landsat, SPOT dan IKONOS. *Jurnal Ilmiah WIDYA*, 1(2), 167-174.

- Taati, A., Sarmadian, F., Mousavi, A., Hossein Pour, C. T., & Shahir, A. H. E. (2015). Land use classification using support vector machine and maximum likelihood algorithms by Landsat 5 TM images. *Walailak Journal of Science and Technology*. Retrieved from <https://doi.org/10.14456/WJST.2015.33>.
- Tang, Z., Engel, B.A., Pijanowski, B.C., Lim, K.J. (2005). Forecasting land use change and its environmental impact at a watershed scale. *Journal of Environmental Management*, 76(1), 35-45. Retrieved from <https://doi.org/10.1016/j.jenvman.2005.01.006>
- Turner, K.W., Wolfe, B.B., Edwards, T.W.D., Lantz, T., Hall, R., Larocque, G. (2014). Controls on Water Balance of Shallow Thermokarst Lakes and Their Relations with Catchment Characteristic: A Multilayer, Landscape-scale, Assessment Based on Water Isotope Tracers and Remote Sensing in Old Crow Flats, Yukon, Canada. *Global Change Biology*, 1585-1603. doi:10.1111/gcb.12465
- Van Dessel, W., Van Rompaey, A., Poelmans, L., & Szilassi, P. (2008). Predicting land cover changes and their impact on the sediment influx in the Lake Balaton catchment. *Landscape Ecology*, 23(6), 645-656.
- Vanwalleghem, T., Gómez, J. A., Amate, J. I., De Molina, M. G., Vanderlinden, K., Guzmán, G., Laguna, A., Giraldez, J. V. (2017). Impact of historical land use and soil management change on soil erosion and agricultural sustainability during the Anthropocene. *Anthropocene*, 17, 13-29.
- Walter, V. (2004). Object-based classification of remote sensing data for change detection. *ISPRS Journal of Photogrammetry and Remote Sensing*, 58(3-4), 225-238. Retrieved from <https://doi.org/10.1016/j.isprsjprs.2003.09.007>
- Wang, L., Luo, Y., Zhang, X., Ma, Q., Kari, H., Jia, L. (2008). Research progress on Application of remote sensing technology in forest pest monitoring. *World For. Res.*, 21, 37-43.
- Wang, X., Zhao, X., Zhang, Z., Yi, L., Zuo, L., Wen, Q., Liu, F., Xu, J., Hu, S., Liu, B. (2016). Assessment of soil erosion change and its relationships with land use/cover change in China from the end of the 1980s to 2010. *CATENA*, 137, 256-268. Retrieved from <https://doi.org/10.1016/j.catena.2015.10.004>
- Weih, R. C., & Riggan, N. D. (2010). Object-based classification vs. pixel-based classification: comparative importance of multi-resolution imagery. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information*, XXXVIII-4/C7.
- Weng, Q. (2002). Land use change analysis in the Zhujiang Delta of China using satellite remote sensing, GIS and stochastic modelling. *Journal of Environmental Management*, 64, 273-284. doi:10.1006/jema.2001.0509
- Wicaksono, K. S. (2010). Kajian Pengurangan Risiko Banjir Melalui Simulasi Bentuk Penggunaan Lahan Dari Aspek Hidrologi di DAS Samin, Jawa Tengah. *Tesis*. Yogyakarta: Sekolah Pascasarjana Universitas Gadjah Mada.

- Wischmeier, WH., Smith, DD. (1978). *Predicting Rainfall Erosion Losses*. United States: US Dept of Agriculture, Science and Education Administration.
- Xue, Jinru., Su, Baofeng. (2017). Significant Remote Sensing Vegetation Indices: A Review of Developments and Applications. *Journal of Sensors*. Retrieved from <https://doi.org/10.1155/2017/1353691>
- Zang, C., Kovacs, J.M. (2012). The Application of Small Unmanned Aerial Systems for Precision Agriculture: A Review. *Precision Agriculture*, 12, 693-712. doi:10.1007/s11119-012-9274-5
- Zare, M., Panagopoulos, T., Loures, L. (2017). Simulating the impacts of future land use change on soil erosion in the Kasilian watershed, Iran. *Land Use Policy*, 67, 558-572.
- Zhang, Y. K., and Schilling, K. E. (2006). Increasing streamflow and baseflow in Mississippi River since the 1940s: Effect of land use change. *J. Hydrol*, 324, 412-422. doi:10.1016/j.jhydrol.2005.09.033
- Zylshal., Susanto, Heri., Hidayat, Sarip. (2016). Ekstraksi Informasi Penutup Lahan Areal Luas dengan Metode Expert Knowledge Object-Based Image Analysis (OBIA) pada Citra Landsat 8 OLI Pulau Kalimantan. *Majalah Ilmiah Globe*, 18, 09-20.