

## DAFTAR PUSTAKA

- Agbor, Chukwuka., O, Makinde. (2018). Land Surface Temperature Mapping Using Geoinformation Techniques. *Geoinformatics FCE CTU*. 17. 10.14311/gi.17.1.2.
- Alexander, P.J., Mills, G. (2014). Local Climate Classification and Dublin's Urban Heat Island. *Atmosphere*, 5(4), 755-774. <https://doi.org/10.3390/atmos5040755>
- Alexander, P.J., Mills, G., Fealy, R. (2015). Using LCZ data to run an urban energy balance model. *Urban Climate*, 13, pp.14-37.
- Alexander, P.J., Kent., Anja, Hopfstock. (2018). Topographic Mapping: Past, Present and Future, *The Cartographic Journal*, 55:4, 305-308, DOI: 10.1080/00087041.2018.1576973
- Ar Rahiem, Muhammad Malik., Fakhlevi, Muhamad. (2019). Analisis Fenomena Pulau Panas Perkotaan Kota Bandung Menggunakan Google Earth Engine. *LAPAN Seminar Nasional Penginderaan Jauh ke-6 2019*, 10.31227/osf.io/bej3n.
- Astuti, N. (2018). *Urban Climate Adaptation In Indonesia*. 1st ed. Wageningen: Land Use Planning (LUP) Group. Wageningen University, Netherlands, pp.19 -28.
- Baiocchi, V., Zottele, F., Dominici, D. (2017). Remote Sensing of Urban Microclimate Change in L'Aquila City (Italy) after Post-Earthquake Depopulation in an Open-Source GIS Environment. *Sensors (Basel, Switzerland)*, 17(2), 404. <https://doi.org/10.3390/s17020404>
- Bappenas. (2013). *Indonesian Population Projection 2010-2035*. Ministry of National Development Planning of the Republic of Indonesia, Jakarta
- Batara Surya, Batara., Mahyuddin, Hadijah., Suriani, Seri., Baharuddin, Baharuddin., Fitriyah, Andi., Menne, Firman., Rasyidi, Emil. (2020). Spatial Transformation of a New City in 2006-2020: Perspectives on the Spatial Dynamics, Environmental Quality Degradation, and Socio-Economic Sustainability of

- Local Communities in Makassar City, Indonesia. *Land*. 9. 1-50. 10.3390/land9090324.
- Bechtel, B., Alexander, P. J., Bohner, J., Ching, J., Conrad, O., Feddema, J., Stewart, I. (2015). Mapping local climate zones for a worldwide Database of the form and function of cities. *ISPRS International Journal of Geo-Information*, 4(1), 199–219.
- Berger, Katja., Atzberger, Clement., Vuolo, Francesco., Weihs, P., D'Urso, Guido. (2014). Experimental assessment of the Sentinel-2 band setting for RTM-based LAI retrieval of sugar beet and maize. *Canadian Journal of Remote Sensing*. 35. 230-247. 10.5589/m09-010.
- Breiman, L. (2001) *Random Forests*. *Machine Learning* 45, 5–32 <https://doi.org/10.1023/A:1010933404324>
- Budi Susetyo, Danang., Purwono, Nugroho., Rahadiati, Ati. (2020). The effects of DEM specification on watershed model in Mataram City, West Nusa Tenggara Province. *IOP Conference Series: Earth and Environmental Science*. pp 500. 012045. doi : 10.1088/1755-1315/500/1/012045.
- Cai, M., Ren, C., Xu, Y., Lau, K., Wang, R. (2018). Investigating the relationship between local climate zone and land surface temperature - A case study in Shanghai. *Urban Climate*, 24, 485-502. <https://doi.org/10.1016/j.uclim.2017.05.010>
- Cardoso, R., Amorim, M. (2018). Urban heat island analysis using the ‘local climate zone’ scheme in Presidente Prudente, Brazil. *Investigaciones Geográficas*, (69). <https://doi.org/10.14198/ingeo2018.69.07>
- Carlson, T. N., Ripley, D. A. (1997). On the Relation between NDVI, Fractional Vegetation Cover, and Leaf Area Index. *Remote Sensing of Environment*, Volume 62, pp. 241 - 252.
- Corbane, C., Politis, P., Kempeneers, P., Simonetti, D., Soille, P., Burger, A., Pesaresi, M., Sabo, F., Syrris, V., Kemper, T. (2020). A global cloud free pixel- based

image composite from Sentinel-2 data. *Data in brief*, 31, 105737.  
<https://doi.org/10.1016/j.dib.2020.105737>

Demuzere, Matthias., Kittner, Jonas., Bechtel, Benjamin. (2021). LCZ Generator: A Web Application to Create Local Climate Zone Maps. *Frontiers in Environmental Science*. 9. doi: 10.3389/fenvs.2021.637455.

Dung, P., Chuc, M., Thanh, N., Hung, B., Chung, D. (2018). Comparison of Resampling Methods on Different Remote Sensing Images for Vietnam's Urban Classification. *Research And Development On Information And Communication Technology*. doi: [10.32913/rd-ict.vol2.no15.663](https://doi.org/10.32913/rd-ict.vol2.no15.663)

Ermida, Sofia., Soares, Patrícia., Mantas, Vasco., Götsche, Frank-M., Trigo, Isabel. (2020). Google Earth Engine Open-Source Code for Land Surface Temperature Estimation from the Landsat Series. *Remote Sensing*. 12. 1471. 10.3390/rs12091471.

ESA. (2015). *Sentinel-2 User Handbook; Revision 2*; ESA Standard Document; ESA: Paris,

Etikan, Ilker. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*. 5. 1. doi : 10.11648/j.ajtas.20160501.11.

Ettehad, Paria., Kaya, Sinasi., Sertel, Elif., Alganci, Ugur. (2019). Separating Built-Up Areas from Bare Land in Mediterranean Cities Using Sentinel-2A Imagery. *Remote Sensing*. 11. 345. doi : 10.3390/rs11030345.

Fawzi, Nurul Ihsan. (2014). Pemetaan Emisivitas Permukaan Menggunakan Indeks Vegetasi. *MAJALAH ILMIAH GLOBE*. 16. 133-139.

Hell, B., Jakobsson, M. (2011). Gridding heterogeneous bathymetric data sets with stacked continuous curvature splines in tension. *Marine Geophysical Research*, 32(4), 493-501. doi: 10.1007/s11001-011-9141-1

Jiménez-Muñoz, J., Sobrino, J. (2003). A generalized single-channel method for retrieving land surface temperature from remote sensing data. *Journal Of Geophysical Research: Atmospheres*, 108(D22). doi: 10.1029/2003jd003480

- Julzarika, A., Harintaka. (2019). "Indonesian DEMNAS: DSM or DTM?," *IEEE Asia-Pacific Conference on Geoscience, Electronics and Remote Sensing Technology (AGERS)* 2019, pp. 31-36, doi: 10.1109/AGERS48446.2019.9034351.
- Kaloustian, N., Bechtel, B. (2016). Local Climatic Zoning and Urban Heat Island in Beirut. *Procedia Engineering*, 169, 216-223. <https://doi.org/10.1016/j.proeng.2016.10.026>
- Kumar, Lalit., Mutanga, Onesimo. (2018). Google Earth Engine Applications Since Inception: Usage, Trends, and Potential. *Remote Sensing*. doi : 10. 1509. 10.3390/rs10101509.
- Kodimalar, T., Vidhya, R., Eswar, Reddy. (2020). Land surface emissivity retrieval from multiple vegetation indices: a comparative study over India. *Remote Sensing Letters*. 11. 176-185. doi : 10.1080/2150704X.2019.1692384.
- Leconte, F., Bouyer, J., Claverie, R., Pétrissans, M. (2015). Using Local Climate Zone scheme for UHI assessment: Evaluation of the method using mobile measurements. *Building And Environment*, 83, 39-49. <https://doi.org/10.1016/j.buildenv.2014.05.005>
- Li, Congcong., Jie, Wang., Lei, Wang., Luanyun, Hu., Peng Gong. (2014). "Comparison of Classification Algorithms and Training Sample Sizes in Urban Land Classification with Landsat Thematic Mapper Imagery". *Remote Sensing*. 6, no. 2: 964-983. <https://doi.org/10.3390/rs6020964>
- Li, L., Qiang, Y., Zheng, Z., Zhang, J. (2019). Research on the Relationship between the Spatial Resolution and the Map Scale in the Satellite Remote Sensing Cartographies. *Proceedings Of The 2019 International Conference On Modeling, Analysis, Simulation Technologies And Applications (MASTA 2019)*. doi: 10.2991/masta-19.2019.33
- Lillesand, T. M., Kiefer, R. W., Chipman, H. W., (2008). *Remote Sensing and Image Interpretation*. Sixth ed. John Willey & Son. New York.

- Lillesand, T., Kiefer, R., Chipman, J. (2015). *Remote sensing and image interpretation (7th ed.)*. John Willey & Son. New York.
- Martinez, Rafael., Nurlina, Irna. (2020). Jakarta: A city of cities. *Cities*. *PMCID*. 106. 102868. 10.1016/j.cities.2020.102868.
- McMillin, L. (1975). Estimation of sea surface temperatures from two infrared window measurements with different absorption. *Journal Of Geophysical Research*, 80(36), 5113-5117. doi: 10.1029/jc080i036p05113
- Merawati, Endang., Derriawan, Derriawan., Supriyadi, Edy. (2021). The Analysis of Factors in Increasing Patient Satisfaction in Hospital. *Proceedings of the Ninth International Conference on Entrepreneurship and Business Management (ICEBM 2020)*. doi : 10.2991/aebmr.k.210507.035.
- Mills G., Bechtel B., Ching J., See L., Feddema J., Foley M., Alexander P., O'Connor M. (2015) An Introduction to the WUDAPT project. *Proceedings of ICUC9*, Toulouse France. Available at <http://www.wudapt.org/>.
- Mirzaee, S., Özgün, O., Ruth, M., Binita, K. (2018). Neighborhood-scale sky view factor variations with building density and height: A simulation approach and case study of Boston. *Urban Climate*, 26, 95-108. doi: 10.1016/j.uclim.2018.08.012
- Mohamed, Abdelmoneim., Odindi, John., Mutanga, Onesimo. (2016). Land Surface Temperature and Emissivity Estimation for Urban Heat Island assessment using medium and low resolution space-borne sensors: A review. *Geocarto International*. 1-41. doi ; 10.1080/10106049.2016.1155657.
- Mohammadi, A., Bin Ahmad, B., Shahabi, H. (2018). Extracting Digital Elevation Model (DEM) from SENTINEL-1 Satellite Imagery: Case Study a Part of Cameron Highlands, Pahang, Malaysia. *International Journal Of Management And Applied Science*, 4(19), 109-114.
- Mohd Nor, Marina., Noor, Norzailawati. (2014). Urban morphology analysis by remote sensing and GIS technique, case study: Georgetown, Penang. *35th Asian*

*Conference on Remote Sensing 2014, ACRS 2014: Sensing for Reintegration of Societies.*

Mu, Xihan., Maogui, Hu., Wanjuan, Song., Gaiyan, Ruan., Yong, Ge., Jinfeng, Wang., Shua,i Huang., Guangjian, Yan. (2015). "Evaluation of Sampling Methods for Validation of Remotely Sensed Fractional Vegetation Cover". *Remote Sensing*. 7, no. 12: 16164-16182. <https://doi.org/10.3390/rs71215817>

Ng, E., (2012). Towards planning and practical understanding of the need for meteorological and climatic information in the design of high-density cities: a case-based study of Hong Kong. *Int. J. Climatol.* 32 (4), 582–598

Ngie, A., Abutaleb, K., Ahmed, F., Darwish, A., Ahmed, M. (2014). *Assessment of urban heat island using satellite remotely sensed imagery: a review. South African Geographical Journal*, 96(2), 198–214. doi:10.1080/03736245.2014.924864

Nurwanda, A., Honjo, T. (2018). Analysis of Land Use Change and Expansion of Surface Urban Heat Island in Bogor City by Remote Sensing. *ISPRS International Journal Of Geo-Information*, 7(5), 165. <https://doi.org/10.3390/ijgi7050165>

Patil, Malini. (2018). Interpolation Techniques in Image Resampling. *International Journal of Engineering and Technology*. 7. 567-570. [doi](https://doi.org/10.14419/ijet.v7i3.34.19383) : 10.14419/ijet.v7i3.34.19383.

Pradhesta, Y., Nurjani, E., Arijuddin, B. (2019). Local Climate Zone classification for climate-based urban planning using Landsat 8 Imagery (A case study in Yogyakarta Urban Area). *IOP Publishing Ltd*, 303, 1-11. <https://doi.org/10.1088/1755-1315/303/1/012022>

Qin, A. Karnieli., P. Berliner (2001), A mono-window algorithm for retrieving land surface temperature from Landsat TM data and its application to the Israel-Egypt border region, *International Journal of Remote Sensing*, 22:18, 3719-3746, DOI: 10.1080/01431160010006971

- Qiu, Chunping., Schmitt, Michael., Zhu, Xiao. (2018). Effect of the training set configuration on Sentinel-2-based urban Local Climate Zone Classification. *The International Archives of the Photogrammetry. Remote Sensing and Spatial Information Sciences*. XLII-2. 10.5194/isprs-archives-XLII-2-931-2018.
- Qiu, C., Mou, L., Schmitt, M., Zhu, X. (2019). Local climate zone-based urban land cover classification from multi-seasonal Sentinel-2 images with a recurrent residual network. *ISPRS Journal Of Photogrammetry And Remote Sensing*, 154, 151-162. <https://doi.org/10.1016/j.isprsjprs.2019.05.004>
- Qiu, C., Schmitt, M., Mou, L., Ghamisi, P., Zhu, X. (2018). Feature Importance Analysis for Local Climate Zone Classification Using a Residual Convolutional Neural Network with Multi-Source Datasets. *Remote Sensing*, 10(10), 1572. <https://doi.org/10.3390/rs10101572>
- Qoriyati., Arifin, Nurhayati. (2020). Study of Urban Farming Potency to Support City Landscape Quality in the District of South Bogor. *IOP Conference Series: Earth and Environmental Science*. 501. 012009. doi : 10.1088/1755-1315/501/1/012009.
- Raya, A., Hasibuan, Hayati. (2020). Spatial Patterns of Land Surface Temperature in Jakarta and Its Surrounding Areas. *IOP Conference Series: Earth and Environmental Science*. 448. 012086. doi : 10.1088/1755-1315/448/1/012086.
- Ramandhani, K., Budiarti, T., Makalew, A. (2020). Development Concept of Productive Landscape with Urban Agriculture Based on Potential Green Open Space and Community Preference in Bogor City. *IOP Conference Series: Earth and Environmental Science*. 501. 012010. doi : 10.1088/1755-1315/501/1/012010.
- Ramezan. A, C., A. Warner, T., E. Maxwell, A. (2019). Evaluation of Sampling and Cross-Validation Tuning Strategies for Regional-Scale Machine Learning Classification. *Remote Sensing*, 11(2), 185. doi: 10.3390/rs11020185
- Rizqihandari, N., Rahartiningtyas, N. S., Indratmoko, S. (2017). Penerapan Surface Model dan Spasial Autokorelasi dalam Pembentukan Struktur Kota Depok.



*Jurnal SPATIAL Wahana Komunikasi Dan Informasi Geografi*, 17(2), 32 - 38.  
<https://doi.org/10.21009/spatial.172.01>

- Rozenstein, O., Qin, Z., Derimian, Y., Karnieli, A. (2014). Derivation of land surface temperature for Landsat-8 TIRS using a split window algorithm. *Sensors*, 14(4), 5768-5780.
- Ruiz, Iván., Shi, Wenzhong. (2018). A Random Forests classification method for urban land-use mapping integrating spatial metrics and texture analysis. *International Journal of Remote Sensing*. 39. 1175-1198. doi : 10.1080/01431161.2017.1395968.
- Rushayati, S., Prasetyo, L., Puspaningsih, N., Rachmawati, E. (2016). Adaptation Strategy Toward Urban Heat Island at Tropical Urban Area. *Procedia Environmental Sciences*, 33, 221-229. doi: 10.1016/j.proenv.2016.03.073
- Rustiadi, Ernan., Pribadi, Didit., Pravitasari, Andrea., Indraprahasta, Galuh, Syahbana., Iman, La Ode. (2015). Jabodetabek Megacity: From City Development Toward Urban Complex Management System. *Advances in Geographical and Environmental Sciences (AGES)*. doi : 10.1007/978-4-431-55043-3\_22.
- Sabin, F.F. (2007). *Remote Sensing: Principles and Interpretation*. Waveland Press Inc. Long Groove.
- Shary, Peter. (2008). Models of Topography. *Advances in Digital Terrain Analysis*. 10.1007/978-3-540-77800-4\_3.
- Simanjuntak, R., Kuffer, M., Reckien, D. (2019). Object-based image analysis to map local climate zones: The case of Bandung, Indonesia. *Applied Geography*, 106, 108-121. <https://doi.org/10.1016/j.apgeog.2019.04.001>
- Sisodia, Pushpendra., Tiwari, Vivekanand., Kumar, Anil. (2014). Analysis of Supervised Maximum Likelihood Classification for remote sensing image. *International Conference on Recent Advances and Innovations in Engineering, ICRAIE 2014*. doi : 10.1109/ICRAIE.2014.6909319.



- Small, C. (2019). Multisensor Characterization of Urban Morphology and Network Structure. *Remote Sensing*, 11(18), 2162. doi: 10.3390/rs11182162
- Solanky, Vijay., Singh, Sangeeta., Katiyar, Sunil. (2018). *Land Surface Temperature Estimation Using Remote Sensing Data*. doi : 10.1007/978-981-10-5801-1\_24.
- Sovann, Pheaktra., Aing, Chhengngunn. (2015). *InVEST Implementation in the Eastern Plain Landscape: An InVEST Land Use/ Land Cover Map Preparation for Mondulkiri Province*. doi : 10.13140/RG.2.2.11658.31687.
- Stefanos, Georganos., Tais, Grippa., Assane, Niang Gadiaga., Catherine, Linard., Moritz, Lennert., Sabine, Vanhuysse., Nicholus, Mboga., Eléonore, Wolff., Stamatis, Kalogirou. (2021) Geographical random forests: a spatial extension of the random forest algorithm to address spatial heterogeneity in remote sensing and population modelling, *Geocarto International*, 36:2, 121-136, doi : 10.1080/10106049.2019.1595177
- Stewart, I.D., Oke, T.R. (2012). Local climate zones for urban temperature studies. *Bull. Am. Meteorol. Soc.* 93 (12), 1879–1900
- Streutker, D.R. (2002). A remote sensing study of the urban heat island of Houston, Texas. *Int. J. Remote Sens*, 23, 2595–2608
- Tateishi, Ryutaro., Tsend-Ayush, Javzandulam., Ghar, Mohamed. (2007). Sampling method for validation of large area land cover mapping. *Journal of the Remote Sensing Society of Japan*. 27. 195-204.
- Twumasi, Y. , Merem, E. , Namwamba, J. , Mwakimi, O. , Ayala-Silva, T. , Frimpong, D. , Ning, Z. , Asare-Ansah, A. , Annan, J. , Oppong, J. , Loh, P. , Owusu, F. , Jeruto, V. , Petja, B. , Okwemba, R. , McClendon-Peralta, J. , Akinrinwoye, C. and Mosby, H. (2021). Estimation of Land Surface Temperature from Landsat-8 OLI Thermal Infrared Satellite Data. A Comparative Analysis of Two Cities in Ghana. *Advances in Remote Sensing*, 10, 131-149. doi: 10.4236/ars.2021.104009.

- Undang-Undang Republik Indonesia Nomor 26 Tahun 2007. (2007). *Penataan Ruang*. 26 April 2007. Lembaran Negara Republik Indonesia Tahun 2007 Nomor 68. Jakarta
- UNFPA. (2013). *Urbanization, demographics, and adaptation to climate change in Semarang, Indonesia Urbanization and Emerging Population Issues Working Paper 11*, UNFPA-Human Settlements Group IIED, London
- UN Habitat. (2012). *Cities and climate change initiative: tool series Developing Local Climate Change Plans: A Guide for Cities in Developing Countries*, UNON Publishing Services Section, Nairobi
- USGS. (2020). *Archive -Landsat 8*. 27 November 2020, [https://www.usgs.gov/core-science-systems/nli/landsat/landsat-8?qt-science\\_support\\_page\\_related\\_con=0#qt-science\\_support\\_page\\_related\\_con](https://www.usgs.gov/core-science-systems/nli/landsat/landsat-8?qt-science_support_page_related_con=0#qt-science_support_page_related_con)
- USGS. (2020). *Archive - Sentinel-2*. 27 November 2020, [https://www.usgs.gov/centers/eros/science/usgs-eros-archive-Sentinel-2?qt-science\\_center\\_objects=0#qt-science\\_center\\_objects](https://www.usgs.gov/centers/eros/science/usgs-eros-archive-Sentinel-2?qt-science_center_objects=0#qt-science_center_objects)
- Valor, E., Caselles, V. (1996). Mapping Land Surface Emissivity from NDVI: Application to European, African, and South American Areas. *Remote Sensing of Environment*, 57, pp. 167 - 184
- Voogt, J.A., Oke, T.R. (2003). Thermal remote sensing of urban climates. *Remote Sens. Environ*, 86, 370–384.
- Wang, L., Lu, Y., Yao, Y. (2019). Comparison of Three Algorithms for the Retrieval of Land Surface Temperature from Landsat 8 Images. *Sensors*. Basel, Switzerland, 19(22), 5049. <https://doi.org/10.3390/s19225049>
- Wang, Weimin., Liu, Kai., Tang, Rong., Wang, Shudong. (2019). Remote sensing image-based analysis of the urban heat island effect in Shenzhen, China. *Physics and Chemistry of the Earth, Parts A/B/C*. 110.
- Wang, Z., Xing, W., Huang, Y., Xie, T. (2016). Studying the Urban Heat Island Using a Local Climate Zone Scheme. *Polish Journal Of Environmental Studies*, 25(6), 2609-2616. <https://doi.org/10.15244/pjoes/63672>

- Wang, Fei, Zhihao Qin, Caiying Song, Lili Tu, Arnon Karnieli, and Shuhe Zhao. 2015. "An Improved Mono-Window Algorithm for Land Surface Temperature Retrieval from Landsat 8 Thermal Infrared Sensor Data" . *Remote Sensing*. 7, no. 4: 4268-4289. <https://doi.org/10.3390/rs70404268>
- Wei, C., Blaschke, T. (2016). Identifying Local Scale Climate Zones Of Urban Heat Island From Hj-1b Satellite Data Using Self-Organizing Maps. *ISPRS - International Archives Of The Photogrammetry, Remote Sensing And Spatial Information Sciences*, XLI-B8(23), 1431-1436. <https://doi.org/10.5194/isprs-archives-xli-b8-1431-2016>
- Xu, Y., Ren, C., Cai, M., Ng, E., Wu, T. (2016). Classification of Local Climate Zones Using ASTER and Landsat Data for High-Density Cities. *IEEE Journal Of Selected Topics In Applied Earth Observations And Remote Sensing*, 473, 1-8. Retrieved 25 September 2020.
- Zheng, Yingsheng., Ren, Chao., Xu, Yong., Wang, Ran., Ho, Justin., Lau, Kevin., Ng, Edward. (2017). GIS-based mapping of Local Climate Zone in the high-density city of Hong Kong. *Urban Climate*. doi : 10.1016/j.uclim.2017.05.008.