

## DAFTAR PUSTAKA

- Apriliani, Y. R., Dwidayati, N. K., & Agoestanto, A. (2021). Estimasi Parameter Distribusi Gamma pada Data Tersensor Tipe II Menggunakan Algoritma Fisher-scoring. *Journal of Mathematics*, 10(1), 31–34.
- Brown, S. (1997). Estimating biomass and biomass change of tropical forest: a primer (Vol. 134). Food and Agriculture Org.
- Chave, J., Andalo, C., Brown, S., Cairns, M. A., Chambers, J. Q., Eamus, D., Fölster, H., Fromard, F., Higuchi, N., Kira, T., Lescure, J. P., Nelson, B. W., Ogawa, H., Puig, H., Riéra, B., & Yamakura, T. (2005). Tree allometry and improved estimation of carbon stocks and balance in tropical forests. *Oecologia*, 145(1), 87–99. <https://doi.org/10.1007/s00442-005-0100-x>
- Davis, B. A., & Jensen, J. R. (1998). Remote sensing of mangrove biophysical characteristics. *Geocarto International*, 13(4), 55–64. <https://doi.org/10.1080/10106049809354665>
- Donato, D. C., Kauffman, J. B., Murdiyarso, D., Kurnianto, S., Stidham, M., & Kanninen, M. (2012). Mangrove adalah salah satu hutan terkaya karbon di kawasan tropis. In *CIFOR Brief* (Vol. 13). <https://doi.org/10.1038/NCEO1123>.
- Fatoyinbo, T., Feliciano, E. A., Lagomasino, D., Lee, S. K., & Trettin, C. (2018). Estimating mangrove aboveground biomass from airborne LiDAR data: A case study from the Zambezi River delta. *Environmental Research Letters*, 13(2). <https://doi.org/10.1088/1748-9326/aa9f03>
- Feliciano, E. A., Wdowinski, S., Potts, M. D., Lee, S. K., & Fatoyinbo, T. E. (2017). Estimating mangrove canopy height and above-ground biomass in the Everglades National Park with airborne LiDAR and TanDEM-X data. *Remote Sensing*, 9(7). <https://doi.org/10.3390/rs9070702>
- Fitria, A. (2021). Ekosistem Mangrove dan Mitigasi Pemanasan Global. *Jurnal Ekologi, Masyarakat Dan Sains*, 2(1). <https://doi.org/10.55448/ems.v2i1.20>
- Fricke, G. A., Synes, N. W., Serra-Diaz, J. M., North, M. P., Davis, F. W., & Franklin, J. (2019). More than climate? Predictors of tree canopy height vary with scale in complex terrain, Sierra Nevada, CA (USA). *Forest Ecology and Management*, 434(December 2018), 142–153. <https://doi.org/10.1016/j.foreco.2018.12.006>
- Fromard, F., Puig, H., Mougin, E., Marty, G., Betoulle, J. L., & Cadamuro, L. (1998). Structure, above-ground biomass and dynamics of mangrove ecosystems: New data from French Guiana. *Oecologia*, 115(1–2), 39–53. <https://doi.org/10.1007/s004420050489>
- Hyypä, J., Hyypä, H., Leckie, D., Gougeon, F., Yu, X., & Maltamo, M. (2008). Review of methods of small-footprint airborne laser scanning for extracting

forest inventory data in boreal forests. *International Journal of Remote Sensing*, 29(5), 1339–1366. <https://doi.org/10.1080/01431160701736489>

Kamal, M., Hidayatullah, M. F., Mahyatar, P., & Ridha, S. M. (2022). Estimation of aboveground mangrove carbon stocks from WorldView-2 imagery based on generic and species-specific allometric equations. *Remote Sensing Applications: Society and Environment*, 26(March), 100748. <https://doi.org/10.1016/j.rsase.2022.100748>

Kamal, M., Kanekaputra, T., Hermayani, R., Utari, D., Geografi, S. I., Geografi, F., Mada, U. G., Geografi, P. F., & Mada, U. G. (2020). Pengaruh Distribusi Spasial Sampel Pemodelan Terhadap Akurasi Estimasi Leaf Area Index (Lai) Mangrove ( the Effect of Spatial Distribution of Modelling Sample To the Accuracy of Mangrove Leaf Area Index Estimation ). *Penginderaan Jauh*, 17(2), 101–112. <https://doi.org/http://dx.doi.or10.30536/j.pjpdcd.2019.v16.a3069>

Kamal, M., Phinn, S., & Johansen, K. (2016). Assessment of multi-resolution image data for mangrove leaf area index mapping. *Remote Sensing of Environment*, 176, 242–254. <https://doi.org/10.1016/j.rse.2016.02.013>

Komiyama, A., Pongpan, S., & Kato, S. (2005). Common allometric equations for estimating the tree weight of mangroves. *Journal of Tropical Ecology*, 21(4), 471–477. <https://doi.org/10.1017/S0266467405002476>

Kustanti, A. (2011). *Manajemen Hutan Mangrove*. Bogor: PT Penerbit IPB Press

Kusuma, H. A., & Oktaviani, N. (2019). Penggunaan Lidar (Light Detection and Ranging) Untuk Mengukur Kedalaman Perairan Dangkal. *Oseana*, 44(1), 54–69. <https://doi.org/10.14203/oseana.2019.vol.44no.1.31>

Lagomasino, D., Fatoyinbo, T., Lee, S. K., Feliciano, E., Trettin, C., & Simard, M. (2016). A comparison of mangrove Canopy height using multiple independent measurements from land, air, and space. *Remote Sensing*, 8(4). <https://doi.org/10.3390/rs8040327>

Latuconsina, H. (2010). Dampak pemanasan global terhadap ekosistem pesisir dan lautan. *Jurnal Ilmiah Agribisnis Dan Perikanan*, 3(1), 30–37. <https://doi.org/10.29239/j.agrikan.3.1.30-37>

Lisein, J., Pierrot-Deseilligny, M., Bonnet, S., & Lejeune, P. (2013). A photogrammetric workflow for the creation of a forest canopy height model from small unmanned aerial system imagery. *Forests*, 4(4), 922–944. <https://doi.org/10.3390/f4040922>

Lohani, B. (1996). *Airborne Altimetric LiDAR: Principle, Data collection, processing and Applications*. [http://home.iitk.ac.in/~blohani/LiDAR\\_Tutorial/Airborne\\_AltimetricLidar\\_Tutorial.htm](http://home.iitk.ac.in/~blohani/LiDAR_Tutorial/Airborne_AltimetricLidar_Tutorial.htm)

Lubis, A. I. M., Prasetyo, Y., & Sasmito, B. (2020). Pemodelan dan Pemetaan Biomassa Atas Permukaan (Aboveground Biomass) Tanaman Karet (Hevea Brasiliensis) dengan L-Band berdasarkan Pengamatan ALOS PALSAR-2

- (Studi Kasus: Afdeling Setro, Kab. Semarang). *Jurnal Geodesi Undip*, 9, 122–131.
- Mahadi, A. T., Siregar, V. P., & Nursugi. (2018). Mapping of mangrove coverage and canopy height using LiDAR data at Sangkulirang District, East Kutai, East Borneo. *IOP Conference Series: Earth and Environmental Science*, 176(1). <https://doi.org/10.1088/1755-1315/176/1/012026>
- Mielcarek, M., Stereńczak, K., & Khosravipour, A. (2018). Testing and evaluating different LiDAR-derived canopy height model generation methods for tree height estimation. *International Journal of Applied Earth Observation and Geoinformation*, 71(May), 132–143. <https://doi.org/10.1016/j.jag.2018.05.002>
- Mulyadi, E., Hendriyanto, O., & Fitriani, N. (2010). Konservasi Hutan Mangrove Sebagai Ekowisata. *Jurnal Ilmiah Teknik Lingkungan*, 2(1), 11–18.
- Murdiyarso, D., Purbopuspito, J., Kaufan, B., Warren, M., Sasmito, S., Donato, D., Manuri, S., Krisnawati, H., Taberima, S., & Kurnianto, S. (2015). The potential of Indonesian mangrove forests for global climate change mitigation. *Nature Climate Change*, 5, 1089–1092. <https://doi.org/10.4324/9781315809120-23>
- Noor, Y. R., Khazali, M., & Suryadiputra, I. N. N. (2012). *Panduan Pengelolaan Mangrove di Indonesia*.
- Nuraini, N. F., Karang, I. W. G. A., & Putra, I. N. G. (2022). Estimasi Stok Karbon Di Atas Permukaan Menggunakan Citra Sentinel-1A di Hutan Mangrove Karang Sewu, Bali. *Journal of Marine Research and Technology*, 5(1), 21. <https://doi.org/10.24843/jmrt.2022.v05.i01.p05>
- Parresol, B. (2009). Assessing Tree and Stand Biomass: A Review with Examples and Critical Comparisons. *Forest Science* 45, 573–593 <https://doi.org/10.1093/forestscience/45.4.573>
- Pearson, T., Walker, S., & Brown, S. (2005). Sourcebook for Land use, Land-use change and forestry projects. *Winrock International and the BioCarbon Fund of the World Bank* 57 (2005), 21(3), 64. [http://wbcarbonfinance.org/docs/Background\\_LULUCF\\_Sourcebook\\_compressed.pdf](http://wbcarbonfinance.org/docs/Background_LULUCF_Sourcebook_compressed.pdf)
- Purnamasari, E., Kamal, M., & Wicaksono, P. (2021). Comparison of vegetation indices for estimating above-ground mangrove carbon stocks using PlanetScope image. *Regional Studies in Marine Science*, 44. <https://doi.org/10.1016/j.rsma.2021.101730>
- Purnobasuki, H. (2012). Pemanfaatan Hutan Mangrove sebagai Penyimpan Karbon. *Buletin PSL Universitas Surabaya*, 28(April 2012), 3–5.
- Putra, I. W. K. E. (2016). Sistem Kerja Sensor Laser pada LIDAR. *Jurnal Media Komunikasi Geografi*, 17(1), 59–70.
- Salum, R. B., Souza-Filho, P. W. M., Simard, M., Silva, C. A., Fernandes, M. E.

- B., Cougo, M. F., do Nascimento, W., & Rogers, K. (2020). Improving mangrove above-ground biomass estimates using LiDAR. *Estuarine, Coastal and Shelf Science*, 236, 106585. <https://doi.org/10.1016/j.ecss.2020.106585>
- Sarjani, F., Sumantyo, J. T. S., & Yohandri. (2017). Pengolahan Citra Satelit ALOS PALSAR Menggunakan Metode Polarimetri untuk Klasifikasi Lahan Wilayah Kota Padang. *Eksakta*, 18(1). <https://doi.org/https://doi.org/10.24036/eksakta/vol18-iss01/21>
- Senoaji, G., & Hidayat, M. F. (2016). Peranan Ekosistem Mangrove di Kota Pesisir Bengkulu dalam Mitigasi Pemanasan Global melalui Penyimpanan Karbon (The Role of Mangrove Ecosystem in the Coastal City of Bengkulu in Mitigating Global Warming through Carbon Sequestration). *Jurnal Manusia Dan Lingkungan*, 23(3), 327. <https://doi.org/10.22146/jml.18806>
- Simard, M., Zhang, K., Rivera-Monroy, V., Ross, M. S., Ruiz, P., Castaneda-Moya, E., Twilley, R. R., & Rodriguez, E. (2006). *Mapping Height and Biomass of Mangrove Forests in Everglades National Park with SRTM Elevation Data*. <https://doi.org/https://doi.org/10.14358/PERS.72.3.299>
- Simarmata, N., Elyza, F., & Vatiady, R. (2019). Kajian Citra Satelit Spot-7 Untuk Estimasi Standing Carbon Stock Hutan Mangrove Dalam Upaya Mitigasi Perubahan Iklim (Climate Changes) Di Lampung Selatan (the Study of Spot-7 Satellite for Standing Carbon Stock Estimation of Mangrove for Climate Change Mi. *Jurnal Penginderaan Jauh Dan Pengolahan Data Citra Digital*, 16(1), 1–8. <http://dx.doi.org/10.30536/j.pjpdcd.2019.v16.a3050>
- Su, Y., Guo, Q., Xue, B., Hu, T., Alvarez, O., Tao, S., & Fang, J. (2016). Spatial distribution of forest aboveground biomass in China: Estimation through combination of spaceborne lidar, optical imagery, and forest inventory data. *Remote Sensing of Environment*, 173, 187–199. <https://doi.org/10.1016/j.rse.2015.12.002>
- Suryono, S., Soenardjo, N., Wibowo, E., Ario, R., & Rozy, E. F. (2018). Estimasi Kandungan Biomassa dan Karbon di Hutan Mangrove Perancak Kabupaten Jembrana, Provinsi Bali. *Buletin Oseanografi Marina*, 7(1), 1. <https://doi.org/10.14710/buloma.v7i1.19036>
- Sutanto. (1994) *Penginderaan Jauh Jilid 1*. Yogyakarta: Gadjah Mada University Press
- Tobias, A., Umali, A. G. A., Malabrigo, P., & Galang, M. A. (2017). Mangrove Forest Inventory and Estimation of Carbon Storage and Sedimentation in Pagbilao. *Wealth Accounting and the Valuation of Ecosystem Services, March 2018*, 1–95. <https://doi.org/10.13140/RG.2.2.15851.03364>
- Utari, D., Kamal, M., & Sidik, F. (2020). Above-ground biomass estimation of mangrove forest using WorldView-2 imagery in Perancak Estuary, Bali. *IOP Conference Series: Earth and Environmental Science*, 500(1). <https://doi.org/10.1088/1755-1315/500/1/012011>
- Van Leeuwen, M., Coops, N. C., & Wulder, M. A. (2010). Canopy surface

reconstruction from a LiDAR point cloud using Hough transform. *Remote Sensing Letters*, 1(3), 125–132. <https://doi.org/10.1080/01431161003649339>

Wahyudi, J. (2016). Mitigasi Emisi Gas Rumah Kaca. *Jurnal Litbang: Media Informasi Penelitian, Pengembangan Dan IPTEK*, 12(2), 104–112. <https://doi.org/10.33658/jl.v12i2.45>

Wang, D., Wan, B., Liu, J., Su, Y., Guo, Q., Qiu, P., & Wu, X. (2020). Estimating aboveground biomass of the mangrove forests on northeast Hainan Island in China using an upscaling method from field plots, UAV-LiDAR data and Sentinel-2 imagery. *International Journal of Applied Earth Observation and Geoinformation*, 85. <https://doi.org/10.1016/j.jag.2019.101986>

Wannasiri, W., Nagai, M., Honda, K., Santitamnont, P., & Miphokasap, P. (2013). Extraction of mangrove biophysical parameters using airborne LiDAR. *Remote Sensing*, 5(4), 1787–1808. <https://doi.org/10.3390/rs5041787>

Wardhani, M. K. (2011). Kawasan Konservasi Mangrove: Suatu Potensi Ekowisata. *Jurnal Kelautan*, 4(1), 60–79.

Wilkes, P., Disney, M., Vicari, M. B., Calders, K., & Burt, A. (2018). Estimating urban above ground biomass with multi-scale LiDAR. *Carbon Balance and Management*, 13(1). <https://doi.org/10.1186/s13021-018-0098-0>