

DAFTAR PUSTAKA

- Ahmad, A., & Quegan, S. (2013). Comparative Analysis of Supervised and Unsupervised Classification on Multispectral Data. *Applied Mathematical Sciences*, 7(74), 3681–3694. <https://doi.org/10.12988/ams.2013.34214>
- Akbar, M. N., Faizal, A., Nafie, Y. A. La, Werorilangi, S., & Mashoreng, S. (2021). Seagrass carbon stock estimation in Panrangluhu coastal waters using remote sensing technology. *IOP Conference Series: Earth and Environmental Science*, 860, 1–10. <https://doi.org/10.1088/1755-1315/860/1/012085>
- Alifatri, L. O., Prayudha, B., & Anggraini, K. (2022). Benthic Habitat Classification Based on Sentinel-2 Imagery in Kei Islands , Southeast Maluku. *Jurnal Ilmu Pertanian Indonesia*, 27(3), 372–384. <https://doi.org/10.18343/jipi.27.3.372>
- Ariasari, A., Hartono, & Wicaksono, P. (2019). Random forest classification and regression for seagrass mapping using PlanetScope image in Labuan Bajo, East Nusa Tenggara. *Proc. SPIE*, 11372(Sixth International Symposium on LAPAN-IPB Satellite). <https://doi.org/10.1117/12.2541718>
- Armitage, A. R., & Fourqurean, J. W. (2016). Carbon storage in seagrass soils: Long-term nutrient history exceeds the effects of near-term nutrient enrichment. *Biogeosciences*, 13(1), 313–321. <https://doi.org/10.5194/bg-13-313-2016>
- Astuty, I. S. (2019). *Pemetaan Komposisi Spesies dan Stok Karbon Atas Permukaan Padang Lamun di Pulau Parang Kepulauan Karimunjawa dengan Citra PlanetScope*. Universitas Gadjah Mada.
- Astuty, I. S., & Wicaksono, P. (2019). Seagrass Species Composition and Above-Ground Carbon Stock Mapping in Parang Island using Planetscope Image. *Sixth Geoinformation Science Symposium*, 1131103. <https://doi.org/10.1117/12.2549137>
- Badan Pusat Statistik. (2022). *Statistik Daerah Kepulauan Seribu 2022*. Badan Pusat Statistik Kabupaten Kepulauan Seribu.
- Bagu, I. A., Susanti Hamidun, M., & Wahyuni Baderan, D. K. (2020). Estimastion of Seagrass Carbon Deposits Enhalus Acoroides in Langala beach Area Dulupi District Boalemo. *Jambura Edu Biosfer Journal*, 2(1), 13–21.
- Bell, S. S., Fonseca, M. S., & Stafford, N. B. (2006). Seagrass Ecology: New Contributions from a Landscape Perspective. *Seagrasses: Biology, Ecology and Conservation*, 625–645. https://doi.org/10.1007/1-4020-2983-7_26

Bengen, D. G. (2002). Ekosistem dan Sumberdaya Pesisir dan Laut serta Pengelolaan Secara Terpadu dan Berkelanjutan. *Prosiding Pelatihan Pengelolaan Wilayah Pesisir Terpadu. 29 Oktober-3 November 2001*, 28–55.

Benjamini, Y., & Braun, H. (2002). John W . Tukey ' s Contributions to Multiple Comparisons. *The Annals of Statistics*, 30(6), 1576–1594.

BMKG. (2023). Climate Outlook 2023. In *BMKG*. BMKG.

https://iklim.bmkg.go.id/bmkgadmin/storage/buletin/BMKG_20Climate_20Outlook_2023.pdf

Breiman, L. (2001). Random Forest. *Machine Learning*, 45(1), 5–32.

<https://doi.org/10.1109/ICCECE51280.2021.9342376>

Bulthuis, D. A. (1987). Effects of temperature on photosynthesis and growth of seagrasses. *Aquatic Botany*, 27(1), 27–40. [https://doi.org/10.1016/0304-3770\(87\)90084-2](https://doi.org/10.1016/0304-3770(87)90084-2)

Cardinale, B. J., Duffy, J. E., Gonzalez, A., Hooper, D. U., Perrings, C., Venail, P., Narwani, A., MacE, G. M., Tilman, D., Wardle, D. A., Kinzig, A. P., Daily, G. C., Loreau, M., Grace, J. B., Larigauderie, A., Srivastava, D. S., & Naeem, S. (2012). Biodiversity loss and its impact on humanity. *Nature*, 486(7401), 59–67.

<https://doi.org/10.1038/nature11148>

Carpenter, S., Byfield, V., Felgate, S. L., Price, D. M., Andrade, V., Cobb, E., Strong, J., Lichtschlag, A., Brittain, H., Barry, C., Fitch, A., Young, A., Sanders, R., & Evans, C. (2022). Using Unoccupied Aerial Vehicles (UAVs) to Map Seagrass Cover from Sentinel-2 Imagery. *Remote Sensing*, 14(3), 477. <https://doi.org/10.3390/rs14030477>

Chen, C. F., Lau, V. K., Chang, N. Bin, Son, N. T., Tong, P. H. S., & Chiang, S. H. (2016). Multi-temporal change detection of seagrass beds using integrated Landsat TM/ETM +/OLI imageries in Cam Ranh Bay, Vietnam. *Ecological Informatics*, 35, 43–54. <https://doi.org/10.1016/j.ecoinf.2016.07.005>

Congalton, R. G., & Green, K. (2019). Assessing the Accuracy of Remotely Sensed Data: Principles and Practices. In *CRC Press, Taylor & Francis Group, LLC* (Third Edit). CRC Press, Taylor & Francis Group, LLC.

Cullen-Unsworth, L. C., & Unsworth, R. K. F. (2016). Strategies to enhance the resilience of the world's seagrass meadows. *Journal of Applied Ecology*, 53, 967–972.

<https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2664.12637>

Danoedoro, P. (2012). *Pengantar Penginderaan Jauh Digital*. Penerbit Andi.

Dekker, A., Brando, V., Anstee, J., Fyfe, S., Malthus, T., & Karpouzli, E. (2006). Remote Sensing of Seagrass Ecosystems: Use of Spaceborne and Airborne Sensors. In

https://doi.org/10.1007/978-1-4020-2983-7_15

Dewi, N. K., Mulyadi, S. Y., & Syafitri, U. D. (2011). The Application of Random Forest in Driver Analysis. *Forum Statistika Dan Komputasi*, 16(1), 35–43.

<http://journal.ipb.ac.id/index.php/statistika/article/view/5443>

Deyanova, D., Gullstrom, M., Lyimo, L. D., Dahl, M., Hamisi, M. I., Mtolera, M. S. P., & Bjork, M. (2017). Contribution of seagrass plants to CO₂ capture in a tropical seagrass meadow under experimental disturbance. *PLoS ONE*, 12(7), 1–19.

<https://doi.org/10.1371/journal.pone.0181386>

Diposaptono, S., Budiman, & Agung, F. (2013). Menyiasati Perubahan Iklim Di Wilayah Pesisir dan Pulau-pulau Kecil. In *Pers Report*.

<https://surajis.files.wordpress.com/2017/12/menyiasati-perubahan-iklim-di-wp3k.pdf>

Draper, N. R., & Smith, H. (1998). Applied Regression Analysis. In *John Wiley & Sons, Inc* (Third Edit). John Wiley & Sons, Inc. <https://doi.org/10.2307/1401351>

Duarte, C. M., Sintes, T., & Marbà, N. (2013). Assessing the CO₂ Capture Potential of Seagrass Restoration Projects. *Journal of Applied Ecology*, 50(6), 1341–1349.

<https://doi.org/10.1111/1365-2664.12155>

Dudley, N., & Stolton, S. (2022). *Best Practice in Delivering the 30x30 Target: Protected Areas and Other Effective Area-Based Conservation Measures* (Issue October).

Duffy, J. E. (2006). Biodiversity and the functioning of seagrass ecosystems. *Marine Ecology Progress Series*, 311(June), 233–250. <https://doi.org/10.3354/meps311233>

Endarwantti, V., Djunaedi, A., & Santosa, G. W. (2023). Estimasi Simpanan Karbon dan Bioekologi Lamun di Pantai Prawean, Jepara. *Journal of Marine Research*, 12(4), 579–585. <https://doi.org/10.14710/jmr.v12i4.35699>

ESA. (2015). Sentinel-2 User Handbook. In *European Space Agency*.

<https://doi.org/10.1021/ie51400a018>

Evans, A. S., Webb, K. L., & Penhale, P. A. (1986). Photosynthetic temperature acclimation in two coexisting seagrasses, *Zostera marina* L. and *Ruppia maritima* L. *Aquatic Botany*, 24(2), 185–197. [https://doi.org/10.1016/0304-3770\(86\)90095-1](https://doi.org/10.1016/0304-3770(86)90095-1)

Fajarwati, S. D., Setianingsih, A. I., & Muzani, M. (2015). Analisis Kondisi Lamun (Seagrass) Di Perairan Pulau Pramuka, Kepulauan Seribu. In *Jurnal SPATIAL Wahana Komunikasi dan Informasi Geografi* (Vol. 13, Issue 1, pp. 22–32).

<https://doi.org/10.21009/spatial.131.03>

Fajeri, F., Lestari, F., & Susiana, S. (2020). Gastropod Association in Seagrass Ecosystems

- Farooq, I., Bangroo, S. A., Bashir, O., Shah, T. I., Malik, A. A., Iqbal, A. M., Mahdi, S. S., Wani, O. A., Nazir, N., & Biswas, A. (2022). Comparison of Random Forest and Kriging Models for Soil Organic Carbon Mapping in the Himalayan Region of Kashmir. *Land*, 11(12), 1–15. <https://doi.org/10.3390/land11122180>
- Fauzan, M. A., Kumara, I. S. W., Yogyantoro, R., Suwardana, S., Nurmalasari, I., Apriyani, S., & Wicaksono, P. (2017). *Kajian Kemampuan Data Sentinel-2A Untuk Pemetaan Persentase Tutupan Lamun di Jerowaru , Lombok Timur. 9512114.*
- Fauzan, M. A., Wicaksono, P., & Hartono. (2021). Characterizing Derawan Seagrass Cover Change with Time-Series Sentinel-2 Images. *Regional Studies in Marine Science*, 48, 102048. <https://doi.org/10.1016/j.rsma.2021.102048>
- Flood, N. (2013). Seasonal composite landsat TM/ETM+ Images using the medoid (a multi-dimensional median). *Remote Sensing*, 5(12), 6481–6500. <https://doi.org/10.3390/rs5126481>
- Fortes, M. D., Ooi, J. L. S., Tan, Y. M., Prathep, A., Bujang, J. S., & Yaakub, S. M. (2018). Seagrass in Southeast Asia: A review of status and knowledge gaps, and a road map for conservation. *Botanica Marina*, 61(3), 269–288. <https://doi.org/10.1515/bot-2018-0008>
- Fourqurean, J., Johnson, B., Kauffman, J. B., Kennedy, H., Lovelock, C., Megonigal, J. P., Rahman, A., Saintilan, N., & Simard, M. (2014). *Coastal Blue Carbon: Methods for assessing carbon stocks and emissions factors in mangroves, tidal salt marshes, and seagrasses.* Conservation International, Intergovernmental Oceanographic Commission of UNESCO, International Union for Conservation of Nature. <http://www.unesco.org/new/en/natural%02sciences/ioc-oceans/sections-and-programmes/ocean-sciences/ocean%02carbon/coastal-blue-carbon/%0A>
- Fourqurean, J. W., Duarte, C. M., Kennedy, H., Marbà, N., Holmer, M., Mateo, M. A., Apostolaki, E. T., Kendrick, G. A., Krause-Jensen, D., McGlathery, K. J., & Serrano, O. (2012). Seagrass ecosystems as a globally significant carbon stock. *Nature Geoscience*, 5(7), 505–509. <https://doi.org/10.1038/ngeo1477>
- Funk, C., Peterson, P., Landsfeld, M., Pedreros, D., Verdin, J., Shukla, S., Husak, G., Rowland, J., Harrison, L., Hoell, A., & Michaelsen, J. (2015). The climate hazards infrared precipitation with stations - A new environmental record for monitoring extremes. *Scientific Data*, 2, 1–21. <https://doi.org/10.1038/sdata.2015.66>

- (2017). Seagrass metabolism and carbon dynamics in a tropical coastal embayment. *Ambio*, 46(6), 667–679. <https://doi.org/10.1007/s13280-017-0916-8>
- Gascon, F., Bouzinac, C., Thépaut, O., Jung, M., Francesconi, B., Louis, J., Lonjou, V., Lafrance, B., Massera, S., Gaudel-Vacaresse, A., Languille, F., Alhammoud, B., Viallefont, F., Pflug, B., Bieniarz, J., Clerc, S., Pessiot, L., Trémas, T., Cadau, E., ... Fernandez, V. (2017). Copernicus Sentinel-2A calibration and products validation status. *Remote Sensing*, 9(6). <https://doi.org/10.3390/rs9060584>
- Gell, F. R., & Whittington, M. W. (2002). Diversity of fishes in seagrass beds in the Quirimba Archipelago, northern Mozambique. *Marine and Freshwater Research*, 53, 115–121.
- Ginting, D. N. B., & Arjasakusuma, S. (2021). Pemetaan Lamun Menggunakan Machine Learning Dengan Citra Planetscope Di Nusa Lembongan. *Jurnal Kelautan Tropis*, 24(3), 323–332. <https://doi.org/10.14710/jkt.v24i3.11180>
- Ginting, D. N. B., Wicaksono, P., & Farda, N. M. (2023). Mapping Benthic Habitat from Worldview-3 Image using Random Forest Case Study: Nusa Lembongan, Bali, Indonesia. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII, XLVIII(November 2022), 123–129.
- Goodman, J. A., Lee, Z. P., & Ustin, S. L. (2008). Influence of Atmospheric and Sea-Surface Corrections on Retrieval of Bottom Depth and Reflectance Using a Semi-Analytical Model: A Case Study in Kaneohe Bay, Hawaii. *Applied Optics*, 47(28), F1–F11. <https://doi.org/10.1364/AO.47.0000F1>
- Gouldsmith, V., & Cooper, A. (2022). Consideration of the carbon sequestration potential of seagrass to inform recovery and restoration projects within the Essex Estuaries Special Area of Conservation (SAC), United Kingdom. *Journal of Coastal Conservation*, 26(4), 1–21. <https://doi.org/10.1007/s11852-022-00882-3>
- Hamuna, B., Tanjung, R. H. R., Suwito, S., Maury, H. K., & Alianto, A. (2018). Study of Seawater Quality and Pollution Index Based on Physical-Chemical Parameters in the Waters of the Depapre District, Jayapura. *Jurnal Ilmu Lingkungan*, 16(1), 35–43. <https://doi.org/10.14710/jil.16.135-43>
- Hamylton, S. M. (2017). Spatial analysis of coastal environments. In *Spatial Analysis of Coastal Environments*. <https://doi.org/10.1080/2325548x.2018.1508194>
- Hanum, H. (2011). Perbandingan Metode Stepwise, Best Subset Regression, dan Fraksi dalam Pemilihan Model Regresi Berganda Terbaik Herlina. *Jurnal Penelitian Sains*,

- Harris, P. T., & Baker, E. K. (2012). Why Map Benthic Habitats? In *Seafloor Geomorphology as Benthic Habitat*. Elsevier Inc. <https://doi.org/10.1016/B978-0-12-385140-6.00001-3>
- Hastuti, A. W., Suniada, K. I., & Nagai, M. (2022). Detection of Coastline Changes using Multi-Temporal Satellite Images: A case study of Gianyar and Klungkung Regency, Bali. *IOP Conference Series: Earth and Environmental Science*, 1095(1). <https://doi.org/10.1088/1755-1315/1095/1/012003>
- Hedley, J. D., Harborne, A. R., & Mumby, P. J. (2005). Technical Note: Simple and Robust Removal of Sun glint for Mapping Shallow-Water Benthos. *International Journal of Remote Sensing*, 26(10), 2107–2112.
- Hedley, J. D., Roelfsema, C., Brando, V., Giardino, C., Kutser, T., Phinn, S., Mumby, P. J., Barrilero, O., Laporte, J., & Koetz, B. (2018). Coral Reef Applications of Sentinel-2: Coverage, Characteristics, Bathymetry and Benthic Mapping with Comparison to Landsat 8. *Remote Sensing of Environment*, 216, 598–614. <https://doi.org/10.1016/j.rse.2018.07.014>
- Hedley, J. D., Russell, B. J., Randolph, K., Pérez-castro, M. Á., Vásquez-elizondo, R. M., Enríquez, S., Dierssen, H. M., & Bell, T. W. (2017). Remote Sensing of Seagrass Leaf Area Index and Species : The Capability of a Model Inversion Method Assessed by Sensitivity Analysis and Hyperspectral Data of Florida Bay. *Frontiers in Marine Science*, 4(November), 1–20. <https://doi.org/10.3389/fmars.2017.00362>
- Hestie, T., Tibshirani, R., & Friedman, J. (2008). The Elements of Statistical Learning: Data Mining, Inference, and Predi. In *Springer Series in Statistics* (Second Edi). Springer Series in Statistics.
- Hochberg, E. J., Andréfouët, S., & Tyler, M. R. (2003). Sea Surface Correction of High Spatial Resolution Ikonos Images to Improve Bottom Mapping in Near-Shore Environments. *IEEE Transactions on Geoscience and Remote Sensing*, 41(7), 1724–1729. <https://doi.org/10.1109/TGRS.2003.815408>
- Hocking, R. R. (1976). A Biometrics Invited Paper. The Analysis and Selection of Variables in Linear Regression. *Biometrics*, 32(1), 1. <https://doi.org/10.2307/2529336>
- Hossain, M. D., & Chen, D. (2019). Segmentation for Object-Based Image Analysis (OBIA): A review of algorithms and challenges from remote sensing perspective. *ISPRS Journal of Photogrammetry and Remote Sensing*, 150, 115–134. <https://doi.org/10.1016/j.isprsjprs.2019.02.009>

- Hossain, M. S., Bujang, J. S., Zakaria, M. H., & Hashim, M. (2015). The application of remote sensing to seagrass ecosystems: an overview and future research prospects. *International Journal of Remote Sensing*, 36(1), 61–113.
<https://doi.org/10.1080/01431161.2014.990649>
- Ichwan, M., Dewi, I. A., & S, Z. M. (2018). Klasifikasi Support Vector Machine (SVM) Untuk Menentukan Tingkat Kemanisan Mangga Berdasarkan Fitur Warna. *MIND Journal*, 3(2), 16–23. <https://doi.org/10.26760/mindjournal.v3i2.16-23>
- Ihsan, A. A., Fauzia, A., Khansa, T. A., Ridwana, R., & Nandi. (2021). Analisis Pemetaan Sebaran Padang Lamun Sebelum dan Selama Pandemi Menggunakan Citra Landsat-8 Oli di Kota Kepulauan Ternate. *Jurnal Spasial*, 8(2), 85–94.
<https://doi.org/10.22202/js.v8i2.4909>
- IPCC. (2023). Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. In *Climate Change 2022 – Impacts, Adaptation and Vulnerability*. Cambridge University Press. <https://doi.org/10.1017/9781009325844.005>
- Irsadi, A., Anggoro, S., Soeprbowati, T. R., Helmi, M., & Khair, A. S. E. (2019). Shoreline and mangrove analysis along semarang-demak, Indonesia for sustainable environmental management. *Jurnal Pendidikan IPA Indonesia*, 8(1), 1–11.
<https://doi.org/10.15294/jpii.v8i1.17892>
- Ismanto, A., Ismunarti, D. H., Sugianto, D. N., Maisyarah, S., Subardjo, P., Dwi Suryoputro, A. A., & Siagian, H. (2019). The potential of ocean current as electrical power sources alternatives in Karimunjawa Islands Indonesia. *Advances in Science, Technology and Engineering Systems*, 4(6), 126–133. <https://doi.org/10.25046/aj040615>
- Isnaen, Z., Pratama, A. P., Utami, A. A., Prananda, A. R. A., Purnama, A. D., Zhafarina, Z., & Wicaksono, P. (2019). Carbon stock estimation of seagrass species *thalassia hempricii* using planet imagery with band ratio transformation in nirwana beach, padang city. *IOP Conference Series: Earth and Environmental Science*, 280(1).
<https://doi.org/10.1088/1755-1315/280/1/012039>
- Jensen, J. R. (2014). Remote Sensing of The Environment: An Earth Resource Perspective. In *Pearson Education Limited* (2nd ed.).
- Jensen, J. R. (2015). *Introductory Digital Image Processing: A Remote Sensing Perspective* (4th ed.). Pearson Education Inc.
- Jiménez-Casero, J., Belando, M. D., Bernardeau-Esteller, J., Marín-Guirao, L., García-Muñoz, R., Sánchez-Lizaso, J. L., & Ruiz, J. M. (2023). A Critical Gap in Seagrass

- Protection: Impact of Anthropogenic Off-Shore Nutrient Discharges on Deep Posidonia oceanica Meadows. *Plants*, 12(3). <https://doi.org/10.3390/plants12030457>
- Juma, G. A., Magana, A. M., Michael, G. N., & Kairo, J. G. (2020). Variation in Seagrass Carbon Stocks Between Tropical Estuarine and Marine Mangrove-Fringed Creeks. *Frontiers in Marine Science*, 7(August), 1–11. <https://doi.org/10.3389/fmars.2020.00696>
- Kalinda, I. O. P., Sasmito, B., & Sukmono, A. (2018). Analisis Pengaruh Koreksi Atmosfer Terhadap Deteksi Land Surface Temperature Menggunakan Citra Landsat 8 di Kota Semarang. *Jurnal Geodesi Undip*, 7(3), 66–76.
- Karawoe, M. (2009). Perspektif Lamun Sebagai Blue Carbon Sink di Laut. *Lokakarya Lamun*.
- Kay, S., Hedley, J. D., & Lavender, S. (2009). Sun Glint Correction of High and Low Spatial Resolution Images of Aquatic Scenes: A Review of Methods for Visible and Near-Infrared Wavelengths. *Remote Sensing*, 1(4), 697–730.
<https://doi.org/10.3390/rs1040697>
- Kennedy, H., & Bjork, M. (2009). Seagrass Meadows. In *The Management of Natural Coastal Carbon Sinks Edited by Dan Laffoley and Gabriel Grimsditch* (pp. 23–30). IUCN. www.iucn.org/marine
- Kristianingsih, L., Arwan Putra Wijaya, & Sukmono, A. (2016). Analisis Pengaruh Koreksi Atmosfer Terhadap Estimasi Kandungan Klorofil-A Menggunakan Citra Landsat 8. *Jurnal Geodesi Undip*, 5(4), 56–64.
- Kumar, Y., & Sahoo, G. (2012). Analysis of Parametric & Non Parametric Classifiers for Classification Technique using WEKA. *International Journal of Information Technology and Computer Science*, 4(7), 43–49.
<https://doi.org/10.5815/ijitcs.2012.07.06>
- Kuo, J. (2007). New monoecious seagrass of *Halophila sulawesii* (Hydrocharitaceae) from Indonesia. *Aquatic Botany*, 87(2), 171–175.
<https://doi.org/10.1016/j.aquabot.2007.04.006>
- Kuriandewa, T. E., Kiswara, W., Hutomo, M., & Soemodihardjo, S. (2003). The Seagrass on Indonesia. In *World Atlas of Seagrasses*. UNEP-WCMC by the University of California Press. <https://doi.org/10.5860/choice.41-3160>
- Kushardono, D. (2019). *Klasifikasi Digital Data Penginderaan Jauh Mendukung Percepatan Penyediaan Informasi Geospasial* (Issue August). Lembaga Penerbangan dan Antariksa Nasional.
- Kutser, T., Vahtmäe, E., & Praks, J. (2009). A Sun Glint Correction Method for

- Hyperspectral Imagery Containing Areas with Non-Negligible Water Leaving NIR
Signal. Remote Sensing of Environment, 113(10), 2267–2274.
<https://doi.org/10.1016/j.rse.2009.06.016>
- Laffoley, D., & Grimsditch, G. (2009). *The Management of Natural Coastal Carbon Sinks*. IUCN.
- Larkum, A. W. D., Kendrick, G. A., & Ralph, P. J. (2018). *Seagrasses of Australia: Structure, ecology and conservation*. Springer.
- Larkum, A. W. D., Orth, R. J., & Duarte, C. M. (2006). Seagrasses: Biology, Ecology and Conservation. *Marine Ecology*, 27(4). <https://doi.org/10.1111/j.1439-0485.2006.00138.x>
- Latuconsina, H., Nessa, M., & Rappe, R. A. (2012). Komposisi spesies dan struktur komunitas ikan padang lamun di Perairan Tanjung Tiram – Teluk Ambon Dalam. *Jurnal Ilmu Dan Teknologi Kelautan Tropis*, 4(1), 35–46.
- Lawrence, A. (2013). Blue Carbon. In *WWf Report*.
- Li, Y., Bai, J., Chen, S., Chen, B., & Zhang, L. (2023). Mapping seagrasses on the basis of Sentinel-2 images under tidal change. *Marine Environmental Research*, 185.
<https://doi.org/10.1016/j.marenvres.2023.105880>
- Lillesand, T. M., Kiefer, R. W., & Chipman, J. W. (2015). *Remote Sensing and Image Interpretation* (7th ed.). John Wiley & Sons, Inc.
- Lyons, M., Roelfsema, C., Kovacs, E., Samper-villarreal, J., Saunders, M., Maxwell, P., & Phinn, S. (2015). Rapid monitoring of seagrass biomass using a simple linear modelling approach , in the field and from space. *Marine Ecology Progress Series*, 530, 1–14.
<https://doi.org/10.3354/meps11321>
- Lyzenga, D. R. (1978). Passive Remote Sensing Techniques for Mapping Water Depth and Bottom Features. *Applied Optics*, 17(3), 379–383. <https://doi.org/10.1364/ao.17.000379>
- Lyzenga, D. R. (1981). Remote Sensing of Bottom Reflectance and Water Attenuation Parameters in Shallow Water using Aircraft and Landsat Data. *International Journal of Remote Sensing*, 2(1), 71–82. <https://doi.org/10.1080/01431168108948342>
- Lyzenga, D. R., Malinas, N. P., & Tanis, F. J. (2006). Multispectral Bathymetry Using a Simple Physically Based Algorithm. *IEEE Transactions on Geoscience and Remote Sensing*, 44(8), 2251–2259. <https://doi.org/10.1109/TGRS.2006.872909>
- Maliki, F., Yuli, E., & Arfiati, D. (2008). *Analisis Conservation Effort to The Se Analisis Conservation Effort to The Seagrass Meadow Agrass Meadow at Lempuyang Coast in Baluran National Park Situbondo Situbondo East Java*. Universitas Brawijaya, Malang.
- Manessa, M. D. M., Haidar, M., Budhiman, S., Winarso, G., Kanno, A., Sagawa, T., &

- Sekine, M. (2016). Evaluating the Performance of Lyzenga's Water Column Correction in Case-1 Coral Reef Water using a Simulated Worldview-2 Imagery. *IOP Conference Series: Earth and Environmental Science*, 47. <https://doi.org/10.1088/1755-1315/47/1/012018>
- Manurung, Nia D., Kondoy, Khristin I F., Rondonuwu, Ari B., Mantiri, Rose O. S. E., Manengkey, Hemanto., Manado, S. R. (2022). Struktur Komunitas Lamun (Seagrass) Di Pantai Meras Manado Sulawesi Utara. *Jurnal Ilmiah PLATAX*, 10(1), 98–107.
- Marbà, N., Duarte, C. M., Alexandre, A., & Cabaço, S. (2004). How do seagrasses grow and spread? *European Seagrasses: An Introduction to Monitoring and Management, May 2014*, 11–18. www.seagrasses.org
- Marcello, J., Eugenio, F., Martín, J., & Marqués, F. (2018). Seabed Mapping in Coastal Shallow Waters Using High Resolution Multispectral and Hyperspectral Imagery. *Remote Sensing*, 10(8), 1208–1229. <https://doi.org/10.3390/rs10081208>
- Marsh, J. A., Dennison, W. C., & Alberte, R. S. (1986). Effects of temperature on photosynthesis and respiration in eelgrass (*Zostera marina* L.). *Journal of Experimental Marine Biology and Ecology*, 101(3), 257–267. [https://doi.org/10.1016/0022-0981\(86\)90267-4](https://doi.org/10.1016/0022-0981(86)90267-4)
- Mashoreng, S., Nafie, Y. A. L., Selamat, B., Isyrini, R., & Amri, K. (2021). Changes in seagrass carbon stock: Implications of decreasing area and percentage cover of seagrass beds in Barranglompo Island, Spermonde archipelago, South Sulawesi, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 763(1). <https://doi.org/10.1088/1755-1315/763/1/012014>
- Mazarrasa, I., Samper-Villarreal, J., Serrano, O., Lavery, P. S., Lovelock, C. E., Marbà, N., Duarte, C. M., & Cortés, J. (2018). Habitat characteristics provide insights of carbon storage in seagrass meadows. *Marine Pollution Bulletin*, 134(January), 106–117. <https://doi.org/10.1016/j.marpolbul.2018.01.059>
- McKenzie, L., Campbell, S., & C, R. (2003). *Seagrasswatch: Manual for Mapping & Monitoring Seagrass Resources by Community (Citizen) Volunteers 2nd edition*. The state of Queensland, Department of Primary Industries, CRC Press.
- McKenzie, L. J., Langlois, L. A., & Roelfsema, C. M. (2022). Improving Approaches to Mapping Seagrass within the Great Barrier Reef: From Field to Spaceborne Earth Observation. *Remote Sensing*, 14(11). <https://doi.org/10.3390/rs14112604>
- McKenzie, L. J., Yaakub, S. M., Tan, R., Seymour, J., & Yoshida, R. L. (2016). Seagrass habitats of Singapore: Environmental drivers and key processes. *Raffles Bulletin of*

- McLeod, E., Chmura, G. L., Bouillon, S., Salm, R., Björk, M., Duarte, C. M., Lovelock, C. E., Schlesinger, W. H., & Silliman, B. R. (2011). A blueprint for blue carbon: Toward an improved understanding of the role of vegetated coastal habitats in sequestering CO₂. *Frontiers in Ecology and the Environment*, 9(10), 552–560. <https://doi.org/10.1890/110004>
- McMillan, C. (1984). The distribution of tropical seagrasses with relation to their tolerance of high temperatures. *Aquatic Botany*, 19(3–4), 369–379. [https://doi.org/10.1016/0304-3770\(84\)90049-4](https://doi.org/10.1016/0304-3770(84)90049-4)
- Misbari, S. (2017). *Quantification of Submerged Seagrass Total Aboveground Biomass for Malaysian Coastal Waters Using Remote Sensing Data*. Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia.
- Mumby, P. J., Clark, C. D., Green, E. P., & Edwards, A. J. (1998). Benefits of Water Column Correction and Contextual Editing for Mapping Coral Reefs. *International Journal of Remote Sensing*, 19(1), 203–210. <https://doi.org/10.1080/014311698216521>
- Mumby, P. J., & Edwards, A. J. (2002). Water Column Correction Techniques. In *Remote Sensing Handbook for Tropical Coastal Management* (pp. 109–120). UNESCO Publishing.
- Murdiyarso, D., Purbopuspito, J., Boone, J. K., Warren, M. W., Sasmito, S. D., Donato, D. C., Manuri, S., Krisnawati, H., Taberima, S., & Kurnianto, S. (2015). The Potential of Indonesian Mangrove Forests for Global Climate Change Mitigation. *Nature Climate Change*, 5(12), 1089–1092. <https://doi.org/10.1109/iccsp.2017.8286346>
- Nawari, Syahza, A., & Siregar, Y. I. (2021). Community-based mangrove forest management as ecosystem services provider for reducing CO₂ emissions with carbon credit system in Bengkalis District, Riau, Indonesia. *Journal of Physics: Conference Series*, 2049(1). <https://doi.org/10.1088/1742-6596/2049/1/012074>
- Nellemann, C., Corcoran, E., Duarte, C. M., Valdés, L., De Young, C., Fonseca, L., & Grimsditch, G. (2009). Blue carbon: A Rapid Response Assessment. In *United Nations Environment Programme*. http://www.grida.no/files/publications/blue-carbon/BlueCarbon_screen.pdf
- Nugraha, A. H., Tasabaramo, I. A., Hernawan, U. E., Rahmawati, S., Putra, R. D., & Idris, F. (2020). Estimasi Stok Karbon Pada ekosistem Lamun Di Perairan Utara Papua (Studi Kasus : Pulau Liki, Pulau Befondi Dan Pulau Meossu). *Jurnal Kelautan Tropis*, 23(3), 291–298. <https://doi.org/10.14710/jkt.v23i3.7939>

- Nugroho, A. S., Witarto, A. B., & Handoko, D. (2003). Application of Support Vector Machine in Bioinformatics. *Proceeding of Indonesian Scientific Meeting in Central Japan, December 20, 2003*. https://doi.org/10.1007/978-3-031-16990-8_13
- Nurdin, N., Amri, K., Mashoreng, S., & Komatsu, T. (2022). Estimation of Seagrass Biomass by In Situ Measurement and Remote Sensing Technology on Small Islands, Indonesia. *Ocean Science Journal*, 57(1), 118–129. <https://doi.org/10.1007/s12601-022-00054-2>
- Nyabakken, J. W. (1982). *Marine Biology: An Ecological Approach - Book Reviews* (3rd ed.). Harper Collins College Publisher.
- Pazzaglia, J., Reusch, T. B. H., Terlizzi, A., Marín-Guirao, L., & Procaccini, G. (2021). Phenotypic plasticity under rapid global changes: The intrinsic force for future seagrasses survival. *Evolutionary Applications*, 14(5), 1181–1201. <https://doi.org/10.1111/eva.13212>
- Philpot, W. (2007). Estimating Atmospheric Transmission and Surface Reflectance From a Glint-Contaminated Spectral Image. *IEEE Transactions on Geoscience and Remote Sensing*, 45(2), 448–457. <https://doi.org/10.1109/TGRS.2006.887161>
- Phinn, S., Roelfsema, C., Kovacs, E., Canto, R., Lyons, M., Saunders, M., & Maxwell, P. (2018). Mapping, monitoring and modelling seagrass using remote sensing techniques. In *Seagrasses of Australia: Structure, Ecology and Conservation* (pp. 445–487). https://doi.org/10.1007/978-3-319-71354-0_15
- Pizaña, J. M. G., Hernández, J. M. N., & Romero, N. C. (2016). Remote Sensing-Based Biomass Estimation. *Environmental Applications of Remote Sensing*, June. <https://doi.org/10.5772/61813>
- Rais, M., Inaku, D. F., Moka, W. J. C., Mashoreng, S., Satari, D. Y., & Rukminasari, N. (2023). Estimasi Stok Karbon Padang Lamun menggunakan Citra Spot-7 di Perairan Pulau Kodingarenglompo, Sangkarrang, Kota Makassar. *Jurnal Kelautan Tropis*, 26(2), 387–398.
- Reis, I., Baron, D., & Shahaf, S. (2018). Probabilistic Random Forest: A Machine Learning Algorithm for Noisy Data Sets. *The Astronomical Journal*, 157(1), 16. <https://doi.org/10.3847/1538-3881/aaf101>
- Repolho, T., Duarte, B., Dionísio, G., Paula, J. R., Lopes, A. R., Rosa, I. C., Grilo, T. F., Caçador, I., Calado, R., & Rosa, R. (2017). Seagrass ecophysiological performance under ocean warming and acidification. *Scientific Reports*, 7, 1–12. <https://doi.org/10.1038/srep41443>
- Rhamadany, A., Suryono, C. A., & Pringgenies, D. (2021). Biomasa dan Simpanan Karbon

Karimunjawa, Jepra. *Journal of Marine Research*, 10(3), 413–420.

Richardson, H. (2015). *A comparison of random forests and linear stepwise regressions to model and map soil carbon in south-central British Columbia grasslands using normalized difference vegetation index based models*. Thompson Rivers University.

Riswanto, E. (2009). Evaluasi Akurasi Klasifikasi Penutup Lahan menggunakan Citra Alos Palsar Resolusi Rendah Studi Kasus di Pulau Kalimantan [Institut Pertanian Bogor]. In *Institut Pertanian Bogor*. [http://downloads.esri.com/archydro/archydro/Doc/Overview of Arc Hydro terrain preprocessing workflows.pdf](http://downloads.esri.com/archydro/archydro/Doc/Overview%20of%20Arc%20Hydro%20terrain%20preprocessing%20workflows.pdf) <https://doi.org/10.1016/j.jhydrol.2017.11.003> <http://sites.tufts.edu/ugis/files/2013/11/Watershed-and-Drainage-Delineation-by-Pour-Point.pdf> <http://www>

Rochmady, R. (2010). Rehabilitasi Ekosistem Padang Lamun. *SSRN Electronic Journal*, 1–25. <https://doi.org/10.2139/ssrn.3045214>

Roelfsema, C. M., Kovacs, E. M., & Phinn, S. R. (2015). Field Data Sets for Seagrass Biophysical Properties for the Eastern Banks, Moreton Bay, Australia, 2004-2014. *Scientific Data*, 2, 1–6. <https://doi.org/10.1038/sdata.2015.40>

Roelfsema, C., & Phinn, S. (2009). A Manual for Conducting Georeferenced Photo Transects Surveys to Assess the Benthos of Coral Reef and Seagrass Habitats. In *Centre for Remote Sensing and Spatial Information Science, The University of Queensland*.

Rui, J., Zhang, H., Zhang, D., Han, F., & Guo, Q. (2019). Total organic carbon content prediction based on support-vector-regression machine with particle swarm optimization. *Journal of Petroleum Science and Engineering*, 180(June), 699–706. <https://doi.org/10.1016/j.petrol.2019.06.014>

Rustam, A. (2019). Pemantauan Ekosistem Lamun Pulau Pari Dan Pulau Tikus Monitoring of Seagrass Ecosystem At Pari Island and Tikus Island. *Jurnal Riset Jakarta*, 12(1), 7–15.

Rustam, A., Adi, N. S., Daulat, A., Kiswara, W., Yusup, D. S., & Rappe, R. H. (2019). *Pedoman Pengukuran Karbon di Ekosistem Padang Lamun*. ITB Press. <https://www.ptonline.com/articles/how-to-get-better-mfi-results>

Sadorsky, P. (2021). A Random Forests Approach to Predicting Clean Energy Stock Prices. *Journal of Risk and Financial Management*, 14(2). <https://doi.org/10.3390/jrfm14020048>

Sagawa, T., Boisnier, E., Komatsu, T., Mustapha, K. Ben, Hattour, A., Kosaka, N., & Miyazaki, S. (2010). Using Bottom Surface Reflectance to Map Coastal Marine Areas: A New Application Method for Lyzenga's Model. *International Journal of Remote*

- Scornet, E. (2021). Trees, Forests, and Impurity-Based Variable Importance in Regression. *Annales de l'Institut Henri Poincaré, Probabilités et Statistiques*, 59(1), 1–40. <https://doi.org/10.1214/21-aihp1240>
- Septiani, R., Citra, I. P. A., & Nugraha, A. S. A. (2019). Perbandingan Metode Supervised Classification dan Unsupervised Classification terhadap Penutup Lahan di Kabupaten Buleleng. *Jurnal Geografi : Media Informasi Pengembangan Dan Profesi Kegeografian*, 16(2), 90–96. <https://doi.org/10.15294/jg.v16i2.19777>
- Serrano, O., Gómez-López, D. I., Sánchez-Valencia, L., Acosta-Chaparro, A., Navas-Camacho, R., González-Corredor, J., Salinas, C., Masque, P., Bernal, C. A., & Marbà, N. (2021). Seagrass blue carbon stocks and sequestration rates in the Colombian Caribbean. *Scientific Reports*, 11(1), 1–12. <https://doi.org/10.1038/s41598-021-90544-5>
- Shafiya, R. W., Djunaedi, A., & Ario, R. (2021). Estimasi Biomassa dan Simpanan Karbon pada Vegetasi Lamun di Perairan Pantai Jepara. *Journal of Marine Research*, 10(3), 446–452. <https://doi.org/10.14710/jmr.v10i3.30998>
- Short, F. T., Mckenzie, L. J., Coles, R. G., Vidler, K. P., Gaeckle, J. L., & Short, F. T. (2015). SeagrassNet Manual for Scientific Monitoring of Seagrass Habitat. In *University of New Hampshire Publication*. University of New Hampshire Publication. http://www.seagrassnet.org/sites/default/files/SeagrassNet_Manual_2006_Worldwide.pdf
- Short, F. T., & Neckles, H. A. (1999). The effects of global climate change on seagrasses. *Aquatic Botany*, 63(3–4), 169–196. [https://doi.org/10.1016/S0304-3770\(98\)00117-X](https://doi.org/10.1016/S0304-3770(98)00117-X)
- Short, F. T., Short, C. A., & Novak, A. B. (2016). Seagrasses. In *Finlayson, C., Milton, G., Prentice, R., Davidson, N. (eds) The Wetland Book*. Springer, Dordrecht. <https://doi.org/10.1007/978-94-007-6173-5>
- Sirait, W. K., Hartati, R., & Widianingsih. (2022). Carbon Deposits in Seagrass Beds At Poteran Waters, Madura East Java. *Journal of Tropical Marine Science*, 5(April), 1–8.
- Sjafrie, N. D. M., Hernawan, U. E., Prayudha, B., Rahmat, Supriyadi, I. H., Iswari, M. Y., Suyarso, Anggraini, K., & Rahmawati, S. (2018). Status padang lamun Indonesia 2018. In *Pusat Penelitian Oseanografi-LIPI*.
- Stepanek, L., Habarta, F., Mala, I., & Marek, L. (2022). A Short Note on Post-Hoc Testing using Random Forests Algorithm: Principles, Asymptotic Time Complexity Analysis, and Beyond. *Proceedings of the 17th Conference on Computer Science and Intelligence Systems, FedCSIS 2022*, 30, 489–497. <https://doi.org/10.15439/2022F265>

Lingkungannya. In *Mulawarman University Press*.

- Sutaryo, D. (2009). Perhitungan Biomassa: Sebuah pengantar untuk studi karbon dan perdagangan karbon. In *Wetlands International Indonesia Programme*. Wetlands International Indonesia Programme.
http://jurnal.lapan.go.id/index.php/berita_dirgantara/article/view/1652%0Ainternal-pdf://100.60.239.168/217-415-1-SM.pdf
- Tabor, K. M., & Holland, M. B. (2021). Opportunities for improving conservation early warning and alert systems. *Remote Sensing in Ecology and Conservation*, 7(1), 7–17.
<https://doi.org/10.1002/rse2.163>
- Tamondong, A. M., Cruz, C. A., Guihawan, J., Garcia, M., Quides, R. R., Cruz, J. A., & Blanco, A. C. (2018). Remote sensing-based estimation of seagrass percent cover and LAI for above ground carbon sequestration mapping. *Proc. SPIE 10778*.
<https://doi.org/10.1117/12.2324695>
- Thomlinson, P. B. (1974). Vegetative Morphology and Meristem Dependence - the Foundation of Productivity in Seagrass. *Aquaculture*, 4, 107–130.
- Touchette, B. W. (2007). Seagrass-salinity interactions: Physiological mechanisms used by submersed marine angiosperms for a life at sea. *Journal of Experimental Marine Biology and Ecology*, 350(1–2), 194–215. <https://doi.org/10.1016/j.jembe.2007.05.037>
- Traganos, D., Aggarwal, B., Poursanidis, D., Topouzelis, K., Chrysoulakis, N., & Reinartz, P. (2018). Towards Global-Scale Seagrass Mapping and Monitoring Using Sentinel-2 on Google Earth Engine : The Case Study of the Aegean and Ionian Seas. *Remote Sensing*, 10(8), 1–14. <https://doi.org/10.3390/rs10081227>
- Tunggadewi, A. T., Syaufina, L., & Puspaningsih, N. (2014). The Application of Remote Sensing for Estimating of Carbon Stock at Reclamation Area of PT. ANTAM UBPE Pongkor, Bogor Regency. *Journal of Natural Resources and Environmental Management*, 4(1), 49–59. <https://doi.org/10.19081/jpsl.2014.4.1.49>
- Tupan, C. I., & Uneputty, P. A. (2018). Growth and Production of Leaves *Thalassia hemprichii* on The Suli Coastal Waters, Ambon Island. *International Journal of Marine Engineering Innovation and Research*, 2(2), 0–4.
<https://doi.org/10.12962/j25481479.v2i2.3647>
- UNEP. (2020). *Out of the Blue the Value of Seagrasses*.
- UNFCCC. (2007). Uniting on Climate: A Guide to the Climate Change Convention and the Kyoto Protocol. In *United Nations Framework Convention on Climate Change*.

- Union, E. (2015). Copernicus: Europe's Eye on Earth. In *European Union*.
<https://doi.org/10.2873/93104>
- United Nations Environment Programme. (2014). *United Nations Environment Programme Annual Report 2014*. UNEP 2014 Annual Report.
<https://www.unep.org/resources/annual-report/unep-2014-annual-report>
- Unsworth, R. K. F., McKenzie, L. J., Collier, C. J., Cullen-Unsworth, L. C., Duarte, C. M., Eklöf, J. S., Jarvis, J. C., Jones, B. L., & Nordlund, L. M. (2019). Global challenges for seagrass conservation. *Ambio*, 48(8), 801–815. <https://doi.org/10.1007/s13280-018-1115-y>
- Veetil, B. K., Ward, R. D., Lima, M. D. A. C., Stankovic, M., Hoai, P. N., & Quang, N. X. (2020). Opportunities for seagrass research derived from remote sensing : a review of current methods. *Ecological Indicators*, 117(May).
<https://doi.org/10.1016/j.ecolind.2020.106560>
- Vieira, V. M. N. C. S., Lopes, I. E., & Creed, J. C. (2019). A model for the biomass-density dynamics of seagrasses developed and calibrated on global data. *BMC Ecology*, 19(1), 1–11. <https://doi.org/10.1186/s12898-019-0221-4>
- Wahyudi, A. J., Rahmawati, S., Irawan, A., Hadiyanto, H., Prayudha, B., Afdal, A., Adi, N. S., Rustam, A., Hernawan, U. E., Rahayu, Y. P., Marindah, Y., Supriyadi, I. H., Solihudin, T., Ati, R. N. A., Kepel, T. L., Mariska, A., Daulat, A., Salim, H. L., Sudirman, N., ... Kiswara, W. (2020). Assessing Carbon Stock and Sequestration of the Tropical Seagrass Meadows in Indonesia. *Ocean Science Journal*, 55(1), 85–97.
- Wahyudin, Y. (2022). Economic analysis of seagrass ecosystem and fish resources linkages in seagrass bed conservation area of Bintan Island. *Jurnal Akuatika Indonesia*, 7(2), 42–49.
- Walker, D. . (1991). The effect of sea temperature on seagrasses and algae on the Western Australian coastline. *Journal of the Royal Society of Western Australia*, 74, 71–77.
<https://doi.org/10.1038/104578b0>
- Wicaksono, P. (2012). The Effect of Sunlight on Satellite-Based Benthic Habitat Identification. *International Journal of Advanced Research in Computer and Communication Engineering*, 1(6), 364–370.
- Wicaksono, P. (2016). Improving the Accuracy of Multispectral-Based Benthic Habitats Mapping using Image Rotations: The Application of Principle Component Analysis and Independent Componentanalysis. *European Journal of Remote Sensing*, 49(1), 433–463.

- Wicaksono, P., Aryaguna, P. A., & Lazuardi, W. (2019). Benthic habitat mapping model and cross validation using machine-learning classification algorithms. *Remote Sensing*, *11*(11), 1–24. <https://doi.org/10.3390/rs11111279>
- Wicaksono, P., Danoedoro, P., Hartono, Nehren, U., Maishella, A., Hafizt, M., Arjasakusuma, S., & Harahap, S. D. (2021). Analysis of field seagrass percent cover and aboveground carbon stock data for non-destructive aboveground seagrass carbon stock mapping using worldview-2 image. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives*, *46*(4/W6-2021), 321–327. <https://doi.org/10.5194/isprs-Archives-XLVI-4-W6-2021-321-2021>
- Wicaksono, P., Fauzan, M. A., Kumara, I. S. W., Yogyantoro, R. N., Lazuardi, W., & Zhafarina, Z. (2019). Analysis of Reflectance Spectra of Tropical Seagrass Species and Their Value for Mapping using Multispectral Satellite Images. *International Journal of Remote Sensing*, *40*(23), 8955–8978. <https://doi.org/10.1080/01431161.2019.1624866>
- Wicaksono, P., & Hafizt, M. (2013). Mapping seagrass from space: Addressing the complexity of seagrass LAI mapping. *European Journal of Remote Sensing*, *46*(1), 18–39. <https://doi.org/10.5721/EuJRS20134602>
- Wicaksono, P., & Kamal, M. (2017). Spectral Response of Healthy and Damaged Leaves of Tropical Seagrass *Enhalus Acoroides*, *Thalassia Hemprichii*, and *Cymodocea Rotundata*. *Remote Sensing for Agriculture, Ecosystems, and Hydrology XIX*, 10421. <https://doi.org/10.1117/12.2278027>
- Wicaksono, P., & Lazuardi, W. (2019). Random Forest Classification Scenarios for Benthic Habitat Mapping using Planetscope Image. *International Geoscience and Remote Sensing Symposium (IGARSS)*, *346*, 8245–8248. <https://doi.org/10.1109/IGARSS.2019.8899825>
- Wicaksono, P., Maishella, A., Arjasakusuma, S., Lazuardi, W., & Harahap, S. D. (2022). Assessment of WorldView-2 images for aboveground seagrass carbon stock mapping in patchy and continuous seagrass meadows. *International Journal of Remote Sensing*, *43*(8), 2915–2941. <https://doi.org/10.1080/01431161.2022.2074809>
- Wicaksono, P., Maishella, A., Wahyudi, A. J., & Hafizt, M. (2022a). Multitemporal seagrass carbon assimilation and aboveground carbon stock mapping using Sentinel-2 in Labuan Bajo 2019–2020. *Remote Sensing Applications: Society and Environment*, *27*(December 2021), 100803. <https://doi.org/10.1016/j.rsase.2022.100803>
- Wicaksono, P., Maishella, A., Wahyudi, A. J., & Hafizt, M. (2022b). Multitemporal Seagrass

Labuan Bajo 2019–2020. *Remote Sensing Applications: Society and Environment*, 27(December 2021), 100803. <https://doi.org/10.1016/j.rsase.2022.100803>

Wicaksono, P., Wulandari, S. A., Lazuardi, W., & Munir, M. (2021). Sentinel-2 Images Deliver Possibilities for Accurate and Consistent Multi-Temporal Benthic Habitat Maps in Optically Shallow Water. *Remote Sensing Applications: Society and Environment*, 23(April), 100572. <https://doi.org/10.1016/j.rsase.2021.100572>

Widagti, N., Setiabudi, G. I., Ampou, E. E., & Surana, I. N. (2021). Kondisi Padang Lamun Di Pesisir Bali Utara: Sumberkima, Lovina, Panimbangan, dan Pacung. *Journal of Fisheries and Marine Research*, 5(2), 452–458.

Wulansari, M. J. (2018). Analisis faktor-faktor yang mempengaruhi seseorang terkena penyakit diabetes melitus menggunakan regresi random forest (Studi kasus: Data diabetes di Virginia Amerika Serikat) [Universitas Islam Indonesia]. In *Universitas Islam Indonesia*.

<http://www.ncbi.nlm.nih.gov/pubmed/7556065>
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC394507>
<http://dx.doi.org/10.1016/j.humphath.2017.05.005>
<https://doi.org/10.1007/s00401-018-1825-z>
<http://www.ncbi.nlm.nih.gov/pubmed/27157931>

Yonvitner, Susanto, H. A., & Yuliana, E. (2019). *Pengelolaan Wilayah Pesisir dan Laut* (2nd ed.). Universitas Terbuka. <https://pustaka.ut.ac.id/lib/wp-content/uploads/pdfmk/MMPI510402-M1.pdf>

Zhang, C. (2015). Applying Data Fusion Techniques for Benthic Habitat Mapping and Monitoring in a Coral Reef Ecosystem. *ISPRS Journal of Photogrammetry and Remote Sensing*, 104, 213–223. <https://doi.org/10.1016/j.isprsjprs.2014.06.005>

Zhang, C., Selch, D., Xie, Z., Roberts, C., Cooper, H., & Chen, G. (2013). Object-based Benthic Habitat Mapping in the Florida Keys from Hyperspectral Imagery. *Estuarine, Coastal and Shelf Science*, 134, 88–97. <https://doi.org/10.1016/j.ecss.2013.09.018>

Zhang, Y., Lu, D., Jiang, X., Li, Y., & Li, D. (2023). Forest Structure Simulation of Eucalyptus Plantation Using Remote-Sensing-Based Forest Age Data and 3-PG Model. *Remote Sensing*, 15(1). <https://doi.org/10.3390/rs15010183>

Zhao, P., Lu, D., Wang, G., Wu, C., Huang, Y., & Yu, S. (2016). Examining spectral reflectance saturation in landsat imagery and corresponding solutions to improve forest aboveground biomass estimation. *Remote Sensing*, 8(6). <https://doi.org/10.3390/rs8060469>



- Zimmerman, R. C., Smith, R. D., & Alberte, R. S. (1989). Thermal acclimation and whole-plant carbon balance in *Zostera marina* L. (eelgrass). *Journal of Experimental Marine Biology and Ecology*, 130(2), 93–109. [https://doi.org/10.1016/0022-0981\(89\)90197-4](https://doi.org/10.1016/0022-0981(89)90197-4)
- Zoffoli, M. L., Frouin, R., & Kampel, M. (2014). Water Column Correction For Coral Reef Studies by Remote Sensing. In *Sensors* (Vol. 14, Issue 9). <https://doi.org/10.3390/s140916881>
- Zulfahmi, S., Siregar, Y. I., & Zulkifli, Z. (2020). Analysis of Carbon Stock in Seagrass *Enhalus acoroides* in Benan Island, Lingga Regency. *Journal of Coastal and Ocean Sciences*, 1(1), 51–59. <https://doi.org/10.31258/jocos.1.1.51-59>
- Zurba, N. (2018). Pengenalan Padang Lamun Suatu Ekosistem yang Terlupakan. In *Unimal Press*. Unimal Press.