



DAFTAR PUSTAKA

- Aldrian, E., & Susanto, R. (2003). Identification of three dominant rainfall regions within Indonesia and their relationship to sea surface temperature. *Int. J. Climatol.*, 23, 1435–1452. <https://doi.org/10.1002/joc.950>
- Badri, M., Lubis, D. P., Susanto, D., & Suharjito, D. (2018). Sistem Komunikasi Peringatan Dini Pencegahan Kebakaran Hutan Dan Lahan Di Provinsi Riau Early Warning Communication Systems in the Prevention of. *Jurnal PIKOM (Penelitian Komunikasi Dan Pembangunan)*, 19(1), 1–16.
- Bappenas. (2016). *Grand Design Pencegahan Kebakaran Hutan, Kebun dan Lahan 2017 - 2019*.
- Barlow, J., Silveira, J., & Cochrane, M. (2009). *The consequences of fire for the fauna of humid tropical forests* (pp. 543–556). https://doi.org/10.1007/978-3-540-77381-8_19
- Brasika, I. B. M. (2022). The Role of El Nino Variability and Peatland in Burnt Area and Emited Carbon in Forest Fire Modeling. *Forest and Society*, 6(1), 84–103. <https://doi.org/10.24259/fs.v6i1.10671>
- Brunelli, M. (2015). *SpringerBriefs in Operations Research*.
- Budiningsih, K. (2017). Implementasi Kebijakan Pengendalian Kebakaran Hutan Dan Lahan Oki. *Jurnal Abdimas Mandiri*, 1(2), 71–77.
- Carter, N. W. (2008). Disaster Management A Disaster Manager's Handbook. In *in: Oceans '77 Conf. Record, Third Annual Conf. on Oceanic Engng.*, (Los Angeles, U.S.a.: Oct.17-19, 1977) (Vols. 2, New Yo). <https://doi.org/10.1109/oceans.1977.1154316>
- Chen, Y., Randerson, J. T., Morton, D. C., DeFries, R. S., Collatz, G. J., Kasibhatla, P. S., Giglio, L., Jin, Y., & Marlier, M. E. (2011). Forecasting fire season severity in South America using sea surface temperature anomalies. *Science*, 334(6057), 787–791. <https://doi.org/10.1126/science.1209472>
- Curran, L., Trigg, S., Pittman, A., Astiani, D., Hardiono, M., Siregar, P., Caniago, I., & Kasischke, E. (2004). Lowland Forest Loss in Protected Areas of Indonesian Borneo. *Science (New York, N.Y.)*, 303, 1000–1003. <https://doi.org/10.1126/science.1091714>
- de Groot, W. J., Field, R. D., Brady, M. A., Roswintiarti, O., & Mohamad, M. (2006). Development of the Indonesian and Malaysian fire danger rating systems. *Mitigation and Adaptation Strategies for Global Change*, 12(1), 165–180. <https://doi.org/10.1007/s11027-006-9043-8>
- Field, R. D., Van Der Werf, G. R., Fanin, T., Fetzer, E. J., Fuller, R., Jethva, H., Levy, R., Livesey, N. J., Luo, M., Torres, O., & Worden, H. M. (2016). Indonesian fire activity and smoke pollution in 2015 show persistent nonlinear sensitivity to El Niño-induced drought. *Proceedings of the*



National Academy of Sciences of the United States of America, 113(33), 9204–9209. <https://doi.org/10.1073/pnas.1524888113>

Graham, L. L. B., Arifanti, A., Malik, I., Pribadi, M. A., & Applegate, G. B. (2021a). Steps towards the development of a Peat Fire Danger Rating System in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 874(1). <https://doi.org/10.1088/1755-1315/874/1/012010>

Graham, L. L. B., Arifanti, A., Malik, I., Pribadi, M. A., & Applegate, G. B. (2021b). Steps towards the development of a Peat Fire Danger Rating System in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 874(1). <https://doi.org/10.1088/1755-1315/874/1/012010>

Groot, W. J. D., Field, R. D., Brady, M. A., Roswintiarti, O., & Mohamad, M. (2007). Development of the Indonesian and Malaysian fire danger rating systems. *Mitigation and Adaptation Strategies for Global Change*, 12(1), 165–180. <https://doi.org/10.1007/s11027-006-9043-8>

Hashimoto, A., Segah, H., Yulianti, N., Naruse, N., & Takahashi, Y. (2021). A new indicator of forest fire risk for Indonesia based on peat soil reflectance spectra measurements. *International Journal of Remote Sensing*, 42(5), 1917–1927. <https://doi.org/10.1080/01431161.2020.1846225>

Hayes, M. J., Svoboda, M. D., Wilhite, D. A., & Vanyarkho, O. V. (1999). Monitoring the 1996 Drought Using the Standardized Precipitation Index. *Bulletin of the American Meteorological Society*, 80(3), 429–438. [https://doi.org/10.1175/1520-0477\(1999\)080<0429:MTDUTS>2.0.CO;2](https://doi.org/10.1175/1520-0477(1999)080<0429:MTDUTS>2.0.CO;2)

Hooijer, A., Page, S., Canadell, J. G., Silvius, M., Kwadijk, J., Wösten, H., & Jauhainen, J. (2010). Current and future CO₂ emissions from drained peatlands in Southeast Asia. *Biogeosciences*, 7(5), 1505–1514. <https://doi.org/10.5194/bg-7-1505-2010>

Imam Maulana, S., Syaufina, L., Budi Prasetyo, L., & Nur Aidi, M. (2019). SPATIAL LOGISTIC REGRESSION MODELS FOR PREDICTING PEATLAND FIRE IN BENGKALIS REGENCY, INDONESIA. In *Journal of Sustainability Science and Management* (Vol. 14).

Istyarini, H. H., Wahyono, S. C., & Haryanti, N. H. (2015). *Kajian Temporal Kekeringan Menggunakan Perhitungan Keetch Byram Dryness Index (KBDI) di Wilayah Banjarbaru, Banjarmasin dan Kotabaru Periode 2005–2013* 89–99. <https://repo-dosen.ulm.ac.id/handle/123456789/23916>

Keetch, J. J., & Byram, G. M. (1968). A Drought Index for Forest Fire Control. *U.S.D.A. Forest Service Research Paper, SE-38*. <https://doi.org/10.1016/j.accpm.2015.04.007>

KLHK. (2020). Statistik 2020 Kementerian Lingkungan Hidup dan Kehutanan. In *Journal of Chemical Information and Modeling* (Vol. 21, Issue 1). <https://doi.org/10.1016/j.tmaid.2020.101607%0Ahttps://doi.org/10.1016/j.ijssci.2020.02.034%0Ahttps://onlinelibrary.wiley.com/doi/abs/10.1111/cjag.12228%0Ahttps://doi.org/10.1016/j.ssci.2020.104773%0Ahttps://doi.org/10.101>



6/j.jinf.2020.04.011%0Ahttps://doi.o

Koplitz, S. N., Mickley, L. J., Marlier, M. E., Buonocore, J. J., Kim, P. S., Liu, T., Sulprizio, M. P., DeFries, R. S., Jacob, D. J., Schwartz, J., Pongsiri, M., & Myers, S. S. (2016). Public health impacts of the severe haze in Equatorial Asia in September–October 2015: demonstration of a new framework for informing fire management strategies to reduce downwind smoke exposure. *Environmental Research Letters*, 11(9), 94023. <https://doi.org/10.1088/1748-9326/11/9/094023>

Krasovskii, A., Khabarov, N., Pirker, J., Kraxner, F., Yowargana, P., Schepaschenko, D., & Obersteiner, M. (2018). Modeling burned areas in Indonesia: The FLAM approach. *Forests*, 9(7). <https://doi.org/10.3390/f9070437>

Kristianti, N., & Joko Santoso, A. (2018). Prediction of Peat Forest Fires Using Wavelet and Backpropagation. In *IJITEE* (Vol. 2, Issue 2). <http://modis-catalog.lapan.go.id>

Li, S., Goddard, L., & DeWitt, D. (2008). Predictive Skill of AGCM Seasonal Climate Forecasts Subject to Different SST Prediction Methodologies. *Journal of Climate - J CLIMATE*, 21, 2169–2186. <https://doi.org/10.1175/2007JCLI1660.1>

M. Bayu Rizky Prayoga. (2022). *MITIGASI KEBAKARAN HUTAN DAN LAHAN BERBASIS KEBASAHAAN LAHAN GAMBAT*. Universitas Indonesia.

Maulana, S. I., Syaufina, L., Budi Prasetyo, L., & Nur Aidi, M. (2019). SPATIAL LOGISTIC REGRESSION MODELS FOR PREDICTING PEATLAND FIRE IN BENGKALIS REGENCY, INDONESIA. In *Journal of Sustainability Science and Management* (Vol. 14).

McKee, T. B., Doesken, N. J., & Kleist, J. (1993). *The relationship of drought frequency and duration to time scales*. January, 17–22.

Mohammadi, F., Bavaghari, M. P., & Shabani, N. (2014). Forest Fire Risk Zone Modeling Using Logistic Regression and GIS: An Iranian Case Study. *Small-Scale Forestry*, 13(1), 117–125. <https://doi.org/10.1007/s11842-013-9244-4>

Mu, E., & Pereyra-Rojas, M. (2017). *Group Decision-Making in AHP*. August 2018. <https://doi.org/10.1007/978-3-319-33861-3>

Murdiyarno, D., Hergoualc'h, K., Verchot, L. V., & Lebel, L. (2013). Indonesia's Forests in the Global Carbon Cycle. In *Indonesia's Fires and Haze*. Springer, 87–97.

Murdiyarno, D., & Adiningsih, E. S. (2007). Climate anomalies, Indonesian vegetation fires and terrestrial carbon emissions. *Mitigation and Adaptation Strategies for Global Change*, 12(1), 101–112. <https://doi.org/10.1007/s11027-006-9047-4>

Murdiyarno, D., Hergoualc'h, K., & Verchot, L. V. (2010). Opportunities for reducing greenhouse gas emissions in tropical peatlands. *Proceedings of the*



National Academy of Sciences, 107(46), 19655–19660.

<https://doi.org/10.1073/pnas.0911966107>

Novra, A., & Fazrias. (2008). Kajian kebijakan pengendalian kebakaran lahan dan hutan Provinsi Jambi : Analisis kebijakan secara antisipatif dan responsif. *Balai Penelitian Dan Pengembangan Daerah Provinsi Jambi*.

Nurdiana, A., & Risdiyanto, I. (2015). Indicator determination of forest and land fires vulnerability using Landsat-5 TM data (case study : Jambi Province). *Procedia Environmental Sciences, 24*, 141–151.
<https://doi.org/10.1016/j.proenv.2015.03.019>

Nuthammachot, N., & Stratoulias, D. (2021). A GIS- and AHP-based approach to map fire risk: a case study of Kuan Kreng peat swamp forest, Thailand. *Geocarto International, 36*(2), 212–225.
<https://doi.org/10.1080/10106049.2019.1611946>

Page, S. E., Siegert, F., Rieley, J. O., Boehm, H.-D. V, Jaya, A., & Limin, S. (2002). The amount of carbon released from peat and forest fires in Indonesia during 1997. *Nature, 420*(6911), 61–65.
<https://doi.org/10.1038/nature01131>

Pan, J., Wang, W., & Li, J. (2016). Building probabilistic models of fire occurrence and fire risk zoning using logistic regression in Shanxi Province, China. *Natural Hazards, 81*(3), 1879–1899. <https://doi.org/10.1007/s11069-016-2160-0>

Prasetyo, L. B., Setiawan, Y., Condro, A. A., Kustiyo, K., Putra, E. I., Hayati, N., Wijayanto, A. K., Ramadhi, A., & Murdiyarso, D. (2022). Assessing Sumatran Peat Vulnerability to Fire under Various Condition of ENSO Phases Using Machine Learning Approaches. *Forests, 13*(6).
<https://doi.org/10.3390/f13060828>

Ritung S, Wahyunto, K Nugroho, Sukarman, Hikmatullah, Suparto, C., & Tafakresnanto. (2011). Peta Lahan Gambut Indonesia Skala 1:250.000. *Balai Besar Litbang Sumberdaya Lahan Pertanian*.

Saaty, T. L., & Vargas, L. G. (2012). *Models , Methods , Concepts & Applications of the Analytic Hierarchy Process* (Vol. 175).

Saharjo, B. H., Syaufina, L., Nurhayati, A. D., Putra, E. I., Waldi, R. D., & Wardana. (2018a). *PENGENDALIAN KEBAKARAN HUTAN DAN LAHAN*.

Saharjo, B. H., Syaufina, L., Nurhayati, A. D., Putra, E. I., Waldi, R. D., & Wardana. (2018b). *PENGENDALIAN KEBAKARAN HUTAN DAN LAHAN di Wilayah Komunitas Terdampak Asap*. IPB Press.

Santika, T., Budiharta, S., Law, E. A., Dennis, R. A., Dohong, A., Struebig, M. J., Medrilzam, Gunawan, H., Meijaard, E., & Wilson, K. A. (2020). Interannual climate variation, land type and village livelihood effects on fires in Kalimantan, Indonesia. *Global Environmental Change, 64*(June), 102129.
<https://doi.org/10.1016/j.gloenvcha.2020.102129>



Simorangkir, D., & Sumantri. (2002). *A Review of Legal , Regulatory and Institutional Aspects of Forest and Land Fires in Indonesia.*

Sitanggang, I. S., Yaakob, R., Mustapha, N., & Ainuddin, A. N. (2014). A decision tree based on spatial relationships for predicting hotspots in peatlands. *Telkomnika (Telecommunication Computing Electronics and Control), 12(2)*, 511–518.

<https://doi.org/10.12928/TELKOMNIKA.v12i2.2036>

Stolle, F., & Lambin, E. F. (2003). *Interprovincial and interannual differences in the causes of land-use fires in Sumatra , Indonesia. 30(4)*, 375–387.

<https://doi.org/10.1017/S0376892903000390>

Subarudi. (2002). Sistem Kelembagaan Pencegahan dan Pengendalian Kebakaran Hutan. *Jurnal Sosial Ekonomi*, 3(1), 47–66.

Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif dan R&D* (19th ed.). ALFABETA.

Sumarga, E. (2017a). Spatial indicators for human activities may explain the 2015 fire hotspot distribution in central Kalimantan Indonesia. *Tropical Conservation Science, 10*. <https://doi.org/10.1177/1940082917706168>

Sumarga, E. (2017b). Spatial indicators for human activities may explain the 2015 fire hotspot distribution in central Kalimantan Indonesia. *Tropical Conservation Science, 10*. <https://doi.org/10.1177/1940082917706168>

Sze, J. S., Jefferson, & Lee, J. S. H. (2019a). Evaluating the social and environmental factors behind the 2015 extreme fire event in Sumatra, Indonesia. *Environmental Research Letters, 14(1)*.
<https://doi.org/10.1088/1748-9326/aaee1d>

Sze, J. S., Jefferson, & Lee, J. S. H. (2019b). Evaluating the social and environmental factors behind the 2015 extreme fire event in Sumatra, Indonesia. *Environmental Research Letters, 14(1)*.
<https://doi.org/10.1088/1748-9326/aaee1d>

Tacconi, L. (2003). Fires in Indonesia: causes, costs and policy implications. *Center for International Forestry Research (CIFOR)*, 38.
<https://doi.org/10.17528/cifor/001552>

Tacconi, L., Moore, P. F., & Kaimowitz, D. (2007). Fires in tropical forests – what is really the problem? lessons from Indonesia. *Mitigation and Adaptation Strategies for Global Change, 12(1)*, 55–66.
<https://doi.org/10.1007/s11027-006-9040-y>

Taufik, M., Setiawan, B. I., & Lanen, H. A. J. Van. (2015). Agricultural and Forest Meteorology Modification of a fire drought index for tropical wetland ecosystems by including water table depth. *Agricultural and Forest Meteorology, 203*, 1–10. <https://doi.org/10.1016/j.agrformet.2014.12.006>

Taufik, M., Veldhuizen, A. ., Wösten, J. H. M., & van Lanen, H. A. J. (2019). Exploration of the importance of physical properties of Indonesia peatlands



to asses critical groundwater table depth, asociated drought and fire hazard.pdf. *Geoderma*, 347, 160–169.

Tsujino, R., Yumoto, T., Kitamura, S., Djamaruddin, I., & Darnaedi, D. (2016). History of forest loss and degradation in Indonesia. *Land Use Policy*, 57, 335–347. [https://doi.org/https://doi.org/10.1016/j.landusepol.2016.05.034](https://doi.org/10.1016/j.landusepol.2016.05.034)

USUP, A., HASHIMOTO, Y., TAKAHASHI, H., & HAYASAKA, H. (2004). Combustion and thermal characteristics of peat fire in tropical peatland in Central Kalimantan, Indonesia. *Tropics*, 14(1), 1–19. <https://doi.org/10.3759/tropics.14.1>

Van Wagner, C. E. (1987). Development and structure of the Canadian forest fire weather index system. In *Forestry*.
<http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Development+and+Structure+of+the+Canadian+Forest+Fire+Weather+Index+System#0>

Vilar del Hoyo, L., Isabel, M. P. M., & Vega, F. J. M. (2011). Logistic regression models for human-caused wildfire risk estimation: Analysing the effect of the spatial accuracy in fire occurrence data. *European Journal of Forest Research*, 130(6), 983–996. <https://doi.org/10.1007/s10342-011-0488-2>

Watch, G. F. (2020). *Indonesia's Forests in Focus*.
<https://www.globalforestwatch.org/country>IDN>

Wooster, M. J., Perry, G. L. W., & Zoumas, A. (2012). Fire, drought and El Niño relationships on Borneo (Southeast Asia) in the pre-MODIS era (1980–2000). *Biogeosciences*, 9(1), 317–340. <https://doi.org/10.5194/bg-9-317-2012>

World Meteorological Organization. (2012). *Standardized Precipitation Index User Guide*.