

DAFTAR PUSTAKA

- [1] M. L. Firdaus, Nasiah, and Uca, "Studi Spasiotemporal Sambaran Petir Cloud to Ground di Kabupaten Gowa Tahun 2017-2019," *J. Environmental Science*, vol. 3, no. 2, pp. 160–170, 2021.
- [2] P. Emeraldi and A. Hazmi, "Pengukuran Radiasi Elektromagnetik Frekuensi Sangat Tinggi (VHF) Petir Compact Intracloud Discharges," *J. Nasional Teknik Elektro*, vol. 7, no. 2, p. 102, Jul. 2018, doi: 10.25077/jnte.v7n2.499.2018.
- [3] A. R. Jacobson, R. H. Holzworth, and X. M. Shao, "Observations of multi-microsecond VHF pulsetrains in energetic intracloud lightning discharges," *Ann. Geophys.*, vol. 29, no. 9, pp. 1587–1604, 2011, doi: 10.5194/angeo-29-1587-2011.
- [4] V. A. Rakov and M. A. Uman, *Lightning Physics and Effects*. Cambridge, U.K.: Cambridge Univ. Press, 2003.
- [5] T. Wang et al., "Multiple-Antennae Observation and EMTR Processing of Lightning VHF Radiations," *IEEE Access*, vol. 6, pp. 26558–26566, May 2018, doi: 10.1109/ACCESS.2018.2833115.
- [6] T. Wang, S. Qiu, L. H. Shi, and Y. Li, "Broadband VHF Localization of Lightning Radiation Sources by EMTR," *IEEE Trans Electromagn Compat*, vol. 59, no. 6, pp. 1949–1957, Dec. 2017, doi: 10.1109/TEMC.2017.2651142.
- [7] V. Cooray, "Basic Principles of Lightning Protection," in **An Introduction to Lightning**, Dordrecht: Springer, 2015, doi: 10.1007/978-94-017-8938-7_17.
- [8] J. R. Dwyer and M. A. Uman, "The physics of lightning," *Phys. Rep.*, vol. 534, pp. 147–241, 2014, doi: 10.1016/j.physrep.2013.09.004.
- [9] A. I. S. Nurhabibah Naibaho, "Analisa Sistem Proteksi Petir Eksternal Tipe Elektrostatik di PT. Pamapersada Nusantara Distrik CCOS Cileungsi-Bogor," *Jurnal Ilmiah Elektrokrisna*, vol. 9, 2021.
- [10] D. Ferruzi Agfanny, "Tren Sambaran Petir *Cloud to Ground* Kota Balikpapan," *Jurnal Geosains Kutai Basin*, vol. 3, 2020.
- [11] Siti Ria Riqmawatin and Putroue Keumala Intan, "Analisa Pemetaan Daerah Rawan Sambaran Petir Di Wilayah Kabupaten Pasuruan Dengan Menggunakan Metode Simple Additive Weighting", *J. Algebra*, vol. 1, no. 2, pp. 198–210, Aug. 2020.
- [12] T. Gunawan, "Analisis Tingkat Kerawanan Bahaya Sambaran Petir Dengan Metode Simple Additive Weighting di Provinsi Bali," *J. Meteorol. Geofis.*, vol. 15, no. 3, doi: 10.31172/JMG.V15I3.221.

- [13] D. W. Sekti, "Analisis Pengaman Eksternal Gangguan Petir di Stasiun Pemancar TVRI Semarang (Gombel)," Skripsi, Fakultas Teknik, Universitas Negeri Semarang, 2015.
- [14] M. Rizky Noor Wahyuddin and Rian Setyahagi, "Analisis Spasial dan Temporal Tingkat Ancaman Sambaran Petir CG di Wilayah Provinsi Sulawesi Selatan," *e-ISSN 26467148*, vol. 2, pp. 96–99, Feb. 2020.
- [15] B. J. Hero, "Karakteristik Stepped Leader Petir Negatif dengan 75 Interval Preliminary Breakdown dan Return Stroke yang Singkat," *Jurusan Teknik Elektro Universitas Andalas*, 2016.
- [16] N. D. Clarence and D. J. Malan, "Preliminary discharge processes in lightning flashes to ground," *Q. J. R. Meteorol. Soc.*, vol. 83, no. 356, pp. 161–172, 1957, doi: 10.1002/qj.49708335603.
- [17] W. Shi, Q. Li, and L. Zhang, "A stepped leader model for lightning including charge distribution in branched channels," *J Appl Phys*, vol. 116, no. 10, Sep. 2014, doi: 10.1063/1.4895155.
- [18] X. Qie, Y. Yu, C. Guo, P. Laroche, G. Zhang, and Q. Zhang, "Some features of stepped and dart-stepped leaders near the ground in natural negative cloud-to-ground lightning discharges," *Ann. Geophys.*, vol. 20, pp. 863–870, 2002.
- [19] Y. Baba and V. A. Rakov, "Electromagnetic models of the lightning return stroke," Feb. 27, 2007, *Blackwell Publishing Ltd.* doi: 10.1029/2006JD007222.
- [20] M. A. Uman and V. A. Rakov, "The interaction of lightning with airborne vehicles," *Prog. Aerosp. Sci.*, vol. 39, pp. 61–81, 2003.
- [21] A. R. Djordjevic, R. M. Biljic, V. D. Likar-Smiljanic, and T. K. Sarkar, "Wideband Frequency-Domain Characterization of FR-4 and Time-Domain Causality," *IEEE Trans. Electromagn. Compat.*, vol. 43, no. 4, pp. 662–667, Nov. 2001.
- [22] G. A. Ambaye, "Time and Frequency Domain Analysis of Signals: A Review," *Int. J. Eng. Res. Technol. (IJERT)*, vol. 9, no. 12, pp. 271–276, 2020. [Online]. Available: www.ijert.org
- [23] W. Yin *et al.*, "Lightning detection and imaging based on vhf radar interferometry," *Remote Sens (Basel)*, vol. 13, no. 11, p. NA, Jun. 2021, doi: 10.3390/rs13112065.
- [24] M. Nishihashi *et al.*, "Three-dimensional VHF lightning mapping system for winter thunderstorms," *J Atmos Ocean Technol*, vol. 30, no. 2, pp. 325–335, Feb. 2013, doi: 10.1175/JTECH-D-12-00084.1.
- [25] A. R. Carballeira, F. A. P. de Figueiredo, and J. M. C. Brito, "Simultaneous Estimation of Azimuth and Elevation Angles Using a Decision Tree-Based Method," *Sensors*, vol. 23, no. 16, Aug. 2023, doi: 10.3390/s23167114.