



## DAFTAR PUSTAKA

- Barfield, R. H., 1934, *Some measurements of the electrical constants of the ground at short wavelengths by the wave tilt method*, Proc. Inst. Electr. Electron. Eng.
- Baker, H. A. and Myers, J. O., 1980, A Topographic Correction for VLF-EM Profiles Based on Model Studies, *Geoexploration*, 18: 135-144.
- Bosch, F. P. and Muller, I., 2005, Improved karst exploration by VLF-EM gradient survey: comparison with other geophysical methods, *European Association of Geoscientist & Engineers, Near Surface Geophysics*, 3:299-310.
- Bothe, A.C.H.D., 1929. *Jiwo Hill and Sothern range*. Excursion Fourt guide, Pasific ScienceCongress, Bandung.
- Burhan, I., 2005, Two Dimension VLF Electromagnetic Wave Response on a Cave In Karst Area Model Using The Finite Elemen Method, *Tesis*, Prodi Fisika UGM, Yogyakarta.
- Coppo, N., Schnegg, P., and Defago, M., 2006, Mapping a shallow large cave using a high resolution Very Low Frequency Electromagnetic Method, *Proceedings of the 8<sup>th</sup> conference on limestone hydrogeology, Neuchatel Switzerland*, page: 268.
- Fischer, G., Le Quang, B.V. dan Muller, I. (1983), —VLF Ground Surveys: a Powerful Tool for the Study of Shallow Two-Dimensional Structures, *Geophysical Prospecting*, Vol. 31, No. 6, hal. 977–991.
- Fokatea, S., 2005, Pemetaan Sungai Bawah Tanah di Daerah Semanu, Dusun Gaduhan, Gunung Kidul, Yogyakarta dengan Menggunakan Metode Elektromagnetik *Very Low Frequency* (VLF) dan Magnetik, *Tesis*, Geofisika FMIPA, UGM, Yogyakarta.
- Fraser, D. C., 1969, Countouring of VLF-EM data, *Geophysics*, 34: 958-967.
- Frolov, A. F., Loginova , M. A. and Kiseleva, M. M., Zhur Physics. Khim. Prom. 35 (1961).
- Guiñón, J.L., Ortega, E., Garcia A, J., and Perez H, V., 2007, Moving Average & Savizki-Golay Smoothing Filter Using Mathcad, *International Conference on Engineering Education-ICEE*, September 3-7, 2007.
- Haryono, E., 2001, Nilai Hidrologis Bukit Karts, *Makalah pada seminar National, Eko-Hidrolik*, 28-29 Maret 2001, Jurusan Teknik Sipil, UGM.
- Kaikkonen, P., 1979, Numerical VLF Modelling, *Geophysical Prospecting*, 27: 815-834.
- Karous, M. dan Hjelt, S. E. 1983. *Linier Filtering of VLF Dip-Angle Measurements*. *Geophysical Prospecting* 31, 782-794.



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PEMODELAN 2D VLF-EM SUNGAI BAWAH TANAH DENGAN MENGGUNAKAN GUIDE MATLAB DI  
DAERAH KARST HARGOSARI  
KECAMATAN SEMANU KABUPATEN GUNUNG KIDUL  
ROFIQUL UMAM, Prof. Dr. Sismanto, M.Si

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Kusumayudha, S.B., 2005, Hidrogelologi Karst dan Geometri Fraktal di Daerah Gunungsewu, Adicita, Yogyakarta.

McNeill, J. D. and Labson, V. F. (1991), —Geological mapping using VLF radio fields, dalam *Electromagnetic Methods in Applied Geophysics : Volume 2, Application, Part B*, ed. Nabighian, M.N., SEG, Tulsa, hal. 521-640.

Milsom, J., 2002, *Field Geophysics-The Geological Field Guide Series*, Third edition, John Wiley & Son, London.

Ndatuwong, L. And Yadav, G. S., 2013, Analysis and Interpretation of In-Phase component of VLF-EM Data Using Hilbert Transform And Amplitude of Analytical Signal, *Journal of Environment and Earth Science*, 3(11): 11-23.

Niasari, S. W., 2005, Eksplorasi Sungai Bawah Tanah dengan Menggunakan Data VLF Terkoreksi Topografi di Daerah Gua Bribin (Antara Mulut Gua Sampai Lubang Bor), *Skripsi*, Geofisika FMIPA UGM, Yogyakarta.

Nissen, J. 1986. *Geophysical Prospecting*. [Volume 34, Issue 7](#), pages 1099–1110

Nurwibowo, A., 2004, Pemetaan Sungai Bawah Tanah Menggunakan Metode Very Low Frequency di daerah Ngotok, Semanu, Gunung Kidul, Yogyakarta, *Skripsi*, Geofisika FMIPA, UGM, Yogyakarta.

Paal, G., 1965, Ore Prospecting based on VLF radio signal, *Geoexploration*, 3: 139-147.

Paterson, N.R. dan Ronka, V. (1971), —Five years of surveying with the very low frequency electromagnetic method, *Geoexploration*, Vol. 9, No. 1, hal. 7–26.

Pirttijarvi, M., 2008, *Gravity interpretation and modeling software based on 3-D block models. User's guide to version 1.6b*. Department of Physics Sciences. University of Oulu. Finlandia.

Rani, S., 2013, Modul Pelatihan Pemograman Matlab, Ilmu Komputer, FMIPA, UGM, Yogyakarta.

Regandara, R., 2009, Geologi dan Karakterisasi Rekahan Pada Batu Gamping di Daerah Nglipar, Kabupaten Gunung Kidul, Daerah Istimewa Yogyakarta, *Skripsi*, Fakultas Ilmu dan Teknologi Kebumian, ITB, Bandung.

Retna, K. A., 2014, Pemodelan 2D Sungai Bawah Tanah Seropan Dengan Metode VLF-EM di Kecamatan Semanu, Kabupaten Gunung Kidul, Yogyakarta. *Tesis*, Fisika FMIPA, UGM, Yogyakarta.

Reynolds, J. M., 1998, *An Introduction to Applied and Environmental Geophysics*, John Wiley & Sons Ltd., West Sussex, England.



- Ridwan, F., 2005, Pemetaan Sungai Bawah Tanah Menggunakan Metode Very Low Frequency di daerah Nangsri, Semanu, Gunung Kidul, Yogyakarta, *Tesis*, Jurusan Fisika FMIPA UGM, Yogyakarta.
- Samodra, H., dan Sutisna, K., 1997, *Peta Geologi Lembar Klaten (Bayat), Jawa, skala 1:50.000*. Pusat Penelitian dan Pengembangan Geologi, Bandung.
- Santos, F. A. M., Mateus, A., Figueiras, Jorge., and Goncalves. M. A., 2006, Mapping Groundwater Contamination Around a Landfill Using the VLF-EM Method- A Case Study, *Journal of Applied Geophysics*, 60:115-125.
- Saydam, A. S., 1981, Very Low-Frequency Elektromagnetic Interpretation Using Tilt Angle and Ellipticity Measurements, *Geophysics*, 46: 1594-1605.
- Sismanto, Eddy H., Sudarmadji, M. Nukman, dan W. Suryanto, 2002, Uji Alat dan Metoda Geofisika Terpadu Terhadap Sungai Bawah Tanah di Goa Bribin, Semanu, Wonosari, Gunung Kidul, Yogyakarta, *Laporan Penelitian*, Geofisika FMIPA, UGM, Yogyakarta.
- Sismanto, Eddy H., Sudarmadji, M. Nukman, dan W. Suryanto, 2003, Tanggapan Gelombang Elektromagnetik Frekuensi Rendah (VLF) dari Sungai Bawah Tanah: Sebuah Uji Coba Metoda VLF di Sekitar Goa Bribin, Gunung Kidul, Yogyakarta, *Jurnal Fisika Indonesia*, 20(7):31-42.
- Sudarno, I., 1997, *Kendali tektonik terhadap pembentukan struktur pada batuan Paleogen dan Neogen di Pegunungan Selatan, Daerah Istimewa Yogyakarta dan sekitarnya*, Thesis Magister Teknik, Institut Teknologi Bandung, Bandung, 167 h.
- Surono, Toha, B., dan Sudarno, I., 1992, *Peta Geologi Lembar Surakarta-Giritontro, Jawa*, Pusat Penelitian Pengembangan Geologi, Bandung.
- Surono, 2008, Litostratigrafi dan sedimentasi Formasi Kebo dan Formasi Butak di Pegunungan Baturagung, Jawa Tengah Bagian Selatan, *Jurnal Geologi Indonesia*, Bandung.
- Van Bemmelen, R. W., 1949. The Geology of Indonesia Vol 1 A, General Geology of Indonesia and Adjacent Archipelagoes, Government Printing Official: The Hague.
- Wahyu, H., 2005, Pemetaan Sungai Bawah Tanah Menggunakan Metode Very Low Frequency di daerah Plebengan, Semanu, Gunung Kidul, Yogyakarta, *Skripsi*, Geofisika FMIPA, UGM, Yogyakarta.
- Widiarsono, T., 2005, Tutorial Praktis Belajar Matlab, Fakultas Teknik, ITB, Bandung.