



## DAFTAR PUSTAKA

- Ager, C. A. & Liard, J. O., 1982. Vertical gravity gradient surveys: Field results and interpretations in British Columbia, Canada. *Geophysics*, 47(6), hal. 919-925.
- Alawiyah, S., 2015. *Microgravity Survey, Residual and Gradient (Vertical and Horizontal) Anomalies, in Geophysical Exploration*, Bandung: Institut Teknologi Bandung.
- Apotria, T. et al., 2009. *Mass Wasting and Detrital Carbonate Deposition, Cepu Block, East Java*. Jakarta, Indonesian Petroleum Association.
- Ardhana, W., 1993. *A Depositional Model for the Early Middle Miocene Ngrayong Formation and Implications for Exploration In the East Java Basin*. Jakarta, Indonesian Petroleum Association, hal. 395-443.
- Ardhana, W., Lunt, P. & Burgon, G. E., 1993. The Deep Marine Sand Facies of the Ngrayong Formation in the Tuban Block, East Java Basin. *Clastic Core Workshop*, hal. 117-175.
- Arfken, G. B. & Weber, H. J., 2005. *Mathematical Methods for Physicists*. edisi ke-6. Burlington: Elsevier Academic Press.
- Asmar, N. H., 2005. *Partial Differential Equations, with Fourier Series and Boundary Value Problems*. edisi ke-2. Upper Saddle River: Pearson Education Ltd..
- Axler, S., Gehring, F. W. & Ribet, K. A., 2003. *Introduction to Smooth Manifolds*. New York: Springer-Verlag.
- Blakely, R. J., 1995. *Potential theory in gravity and magnetic applications*. Cambridge: Cambridge University Press.
- BMKG, 2014. *BMKG | Badan Meteorologi, Klimatologi dan Geofisika*. [Dalam jaringan] Tersedia di: [http://www.bmkg.go.id/BMKG\\_Pusat/Gempabumi\\_-\\_Tsunami/Geopotensial/Gaya\\_Berat.bmkg](http://www.bmkg.go.id/BMKG_Pusat/Gempabumi_-_Tsunami/Geopotensial/Gaya_Berat.bmkg) [Diakses 11 Juni 2016].
- Brace, W. F. & Bombolakis, E. G., 1963. A Note on Brittle Crack Growth in Compression. *Journal of Geophysical Research*, 68(12), hal. 3709-3713.
- Corwin, L. J. & Szczarba, R. H., 1982. *Multivariable Calculus*. New York: Marcel Dekker Inc.
- Dampney, C. N. G., 1969. The equivalent source technique. *Geophysics*, 34(1), hal. 39-53.



- Daneš, Z. F. & Oncley, L. A., 1962. An analysis of some second derivative methods. *Geophysics*, 27(5), hal. 611-615.
- Defense Mapping Agency, 1987. *Supplement to Department of Defense World Geodetic System 1984 Technical Report: Part I - Methods, Techniques, and Data Used in WGS 84 Development*, Washington, DC: US Department of Defense.
- Dransfield, M., 2007. *Airborne Gravity Gradiometry in the Search for Mineral Deposits*. Toronto, Decennial Mineral Exploration Conferences.
- Dubey, C. P. & Tiwari, V. M., 2016. Computation of the gravity field and its gradient: Some applications. *Computers & Geosciences*, Volume 88, hal. 83–96.
- Elkins, T. A., 1951. The second derivative method of gravity interpretation. *Geophysics*, 16(1), hal. 29-50.
- Espindola, J. M., Mena, M., de La Fuente, M. & Campos-Enriquez, J. O., 1995. A model of the Chicxulub impact structure (Yucatan, Mexico) based on its gravity and magnetic signatures. *Physics of the Earth and Planetary Interiors*, 92(3-4), hal. 271-278.
- Evjen, H. M., 1936. The Place of the Vertical Gradient in Gravitational Interpretations. *Geophysics*, 1(1), hal. 127-136.
- Fajkiewicz, Z. J., 1976. Gravity vertical gradient measurements for the detection of small geologic and anthropogenic forms. *Geophysics*, 41(5), hal. 1016-1030.
- Fedi, M. et al., 2005. Understanding the structural setting in the Southern Apennines (Italy): insight from Gravity Gradient Tensor. *Tectonophysics*, Volume 397, hal. 21–36.
- Fedi, M. & Florio, G., 2001. Detection of potential fields source boundaries by enhanced horizontal derivative method. *Geophysical Prospecting*, Volume 49, hal. 40-58.
- Fedi, M. & Florio, G., 2002. A stable downward continuation by using the ISVD method. *Geophysical Journal International*, 151(1), hal. 146-156.
- Fullea, J., Fernández, M. & Zeyen, H., 2008. FA2BOUG—A FORTRAN 90 code to compute Bouguer gravity anomalies from gridded free-air anomalies: Application to the Atlantic-Mediterranean transition zone. *Computers & Geosciences*, 34(12), hal. 1665-1681.
- Grant, F. S. & West, G. F., 1965. *Interpretation Theory in Applied Geophysics*. New York: McGraw-Hill Book Company.



Guo, L. et al., 2013. Preferential filtering for gravity anomaly separation.  
*Computers & Geosciences*, Volume 51, hal. 247-254.

GWR Instruments, Inc., 2011. *iGrav SG Meter Brochure*. [Dalam jaringan] Terse dia di: [http://catalog.gwrinstruments.com/Asset/iGrav\\_Brochure\\_Product\\_ion\\_Rev1\\_4Page.pdf](http://catalog.gwrinstruments.com/Asset/iGrav_Brochure_Product_ion_Rev1_4Page.pdf)  
[Diakses 18 April 2016].

Hall, R., 2012. Late Jurassic–Cenozoic reconstructions of the Indonesian region and the Indian Ocean. *Tectonophysics*, Volume 570-571, hal. 1-41.

Hamilton, W. B., 1978. *Tectonic Map of the Indonesian region: USGS Map I-875-D*, 1:5,000,000, Reston: USGS.

Hamilton, W. B., 1979. *Tectonics of the Indonesian region*, Washington D.C.: U.S. Government Printing Office.

Hammer, S. & Anzoleaga, R., 1975. Exploring for Stratigraphic Traps with Gravity Gradients. *Geophysics*, 40(2), hal. 256-268.

Hinze, W. J., von Frese, R. R. B. & Saad, A. H., 2013. *Gravity and Magnetic Exploration Principles, Practices, and Applications*. Cambridge: Cambridge University Press.

Hofmann-Wellenhof , B. & Moritz , H., 2005. *Physical Geodesy*. Bad Vöslau: Springer-Verlag Wien.

Jacobsen, B. H., 1987. A case for upward continuation as a standard separation filter for potential-field maps. *Geophysics*, 52(8), hal. 1138-1148.

Jacoby, W. & Smilde, P. L., 2009. *Gravity Interpretation: Fundamentals and Application of Gravity Inversion and Geological Interpretation*. Berlin: Springer-Verlag.

Kellogg, O. D., 1929. *Foundations of Potential Theory*. Berlin: Verlag von Julius Springer.

Kingston, J., 1988. *Undiscovered Petroleum Resources of Indonesia*, Denver: United States Department of The Interior Geological Survey.

Koyné, A., 1952. An Unpublished Letter of Robert Hooke to Isaac Newton. *Isis*, 43(4), hal. 312-337.

Kusnandar, Y., 2009. *The Synrift Facies Distribution Modeling of Pre-Ngimbang and Ngimbang Formations and Its Implication to the Hydrocarbon Exploration In Laut Bali Timur Area East Java-Lombok Basin*. Bandung: Institut Teknologi Bandung.

LaFehr, T. R., 1991. An exact solution for the gravity curvature (Bullard B). *Geophysics*, 56(8), hal. 1179-1184.



- Lee, J. B., 2001. FALCON gravity gradiometer technology. *Exploration Geophysics*, 32(3/4), hal. 247-250.
- Marson, I. & Klingele, E. E., 1993. Advantages of using the vertical gradient of gravity for 3-D interpretation. *Geophysics*, 58(11), hal. 1588-1595.
- Mickus, K. L. & Hinojosa, J. H., 2001. The complete gravity gradient tensor derived from the vertical component of gravity: a Fourier transform technique. *Journal of Applied Geophysics*, 46(3), hal. 159-174.
- Moler, C., 2004. *Numerical Computing with MATLAB*. Natick: The MathWorks, Inc.
- Moler, C. B., 2004. *Numerical Computing with MATLAB*. Philadelphia: Society for Industrial and Applied Mathematics.
- Naylor, R. H., 1974. Galileo and the Problem of Free Fall. *The British Journal for the History of Science*, 7(2), hal. 105-134.
- Nettleton, L. L., 1942. Gravity and magnetic calculations. *Geophysics*, 7(3), hal. 293-310.
- Nettleton, L. L., 1954. Regionals, Residuals, and Structures. *Geophysics*, 19(1), hal. 1-22.
- Noya, Y., Suwarti, T., Suharsono & Sarmili, L., 1992. *Peta Geologi Lembar Mojokerto, Jawa*, Bandung: Pusat Penelitian dan Pengembangan Geologi.
- Nurdyianto, B., 2015. *Komunikasi pribadi* [Wawancara] (2 November 2015).
- Pálinkáš, V., 2006. Precise tidal measurements by spring gravimeters at the station Pecný. *Journal of Geodynamics*, Volume 41, hal. 14–22.
- Panjaitan, S., 2010. Prospek Migas Pada Cekungan Jawa Timur Dengan Pengamatan Metode Gayaberat. *Buletin Sumber Daya Geologi*, 5(3), hal. 168-181.
- Parsneau, H. P., 1970. *The Development of Two-dimensional Digital Operators for the Filtering of Potential Field Data*. Montreal: McGill University.
- Pavlis, N. K., Holmes, S. A., Kenyon, S. C. & Factor, J. K., 2012. The development and evaluation of the Earth Gravitational Model 2008 (EGM2008). *Journal of Geophysical Research*, 117(B4), hal. 1-38.
- Pringgoprawiro, H. & Sukido, 1992. *Peta Geologi Lembar Bojonegoro, Jawa Timur*. Bandung: Pusat Penelitian dan Pengembangan Geologi.
- Rose, M., Zeng, Y. & Dransfield, M., 2006. Applying FALCON® gravity gradiometry to hydrocarbon exploration in the Gippsland Basin, Victoria. *Exploration Geophysics*, 37(2), hal. 180-190.



- Rosenbach, O., 1953. A contribution to the computation of the "second derivative" from gravity data. *Geophysics*, 18(4), hal. 894-907.
- Rosenbach, O., 1954. Quantitative Studies Concerning the Vertical Gradient and Second Derivative Methods of Gravity Interpretation. *Geophysical Prospecting*, 2(2), hal. 128–138.
- Sandwell, D. et al., 2013. Toward 1-mGal accuracy in global marine gravity from CryoSat-2, Envisat, and Jason-1. *The Leading Edge*, August, 32(8), hal. 892-899.
- Sandwell, D. T., 2014. *README\_V23.txt*. [Dalam jaringan] Tersedia di: [ftp://topex.ucsd.edu/pub/global\\_grav\\_1min/README\\_V23.txt](ftp://topex.ucsd.edu/pub/global_grav_1min/README_V23.txt) [Diakses 1 September 2015].
- Satyana, A. H., 2005. *Oligo-Miocene Carbonates of Java, Indonesia: Tectonic-Volcanic Setting and Petroleum Implications*. Jakarta, Indonesian Petroleum Association.
- Satyana, A. H., 2007. *Central Java, Indonesia – A “Terra Incognita” in Petroleum Exploration: New Considerations on the tectonic Evolution and Petroleum Implications*. Jakarta, Indonesian Petroleum Association.
- Satyana, A. H. & Djumiati, M., 2003. *Oligo-Miocene Carbonates of the East Java Basin, Indonesia : Facies Definition Leading to Recent Significant Discoveries*. Barcelona, AAPG.
- Satyana, A. H., Erwanto, E. & Prasetyadi, C., 2004. *Rembang-Madura-Kangean-Sakala (RMKS) Fault Zone, East Java Basin: The Origin and Nature of a Geologic Border*. Bandung, Indonesian Association of Geologist.
- Satyana, A. H. & Purwaningsih, M. E., 2003. *Geochemistry of the East Java Basin: New Observations on Oil Grouping, Genetic Gas Types and Trends of Hydrocarbon Habitats*. Jakarta, Indonesian Petroleum Association.
- Sharaf, E., Simo, J., Carroll, A. R. & Shields, M. L., 2005. Stratigraphic evolution of Oligocene–Miocene carbonates and siliciclastics, East Java basin, Indonesia. *AAPG Bulletin*, 89(6), hal. 799–819.
- Shields, M. L., 2005. *The Evolution of the East Java Basin, Indonesia*. Madison: University of Wisconsin.
- Smyth, H., Hall, R., Hamilton, J. & Kinny, P., 2005. *East Java: Cenozoic basins, volcanoes and ancient basement*. Jakarta, Indonesian Petroleum Association.
- Sribudiyani, et al., 2003. *The Collision of the East Java Microplate and Its Implication for Hydrocarbon Occurrences in the East Java Basin*. Jakarta, Indonesian Petroleum Association.



- Steinshouer, D. W., Qiang, J., McCabe, P. J. & Ryder, R. T., 1997. *Maps showing geology, oil and gas fields and geologic provinces of the Asia Pacific Region*, Denver: US Geological Survey.
- Stinner, A., 1994. The story of force: from Aristotle to Einstein. *Physics Education*, Volume 29, hal. 77-85.
- Talwani, M., Feldman, W. K. & Schweitzer, M., 2002. *System and process for secondary hydrocarbon recovery*. United States of America, Nomor Paten US 6,467,543 B1.
- Telford, W. M., Geldart, L. P. & Sheriff, R. E., 1990. *Applied Geophysics*. edisi ke-2. Cambridge: Cambridge University Press.
- Tipler, P. A. & Mosca, G., 2008. *Physics for Scientists and Engineers with Modern Physics*. edisi ke-6. New York: W. H. Freeman and Company.
- Untung, M. & Sato, Y., 1978. *Gravity and Geological Studies in Java, Indonesia*. Bandung: Geological Survey of Indonesia.
- van Bemmelen, R. W., 1949. *The Geology of Indonesia*. The Hague: Government Printing Office.
- Vening Meinesz, F. A., 1932. *Gravity Expeditions at Sea*. Delft: Publications of the Netherlands Geodetic Commission.
- Vreugde, L. M. H., 1935. *Quelques anomalies de pesanteur dans le nord de Java (Indes néerlandaises)*. Paris, Cong. Intern. mines VII.
- Weisstein, E. W., 2006. *Wolfram Mathworld: Taylor Series*. [Dalam jaringan] Tersedia di: <http://mathworld.wolfram.com/TaylorSeries.html> [Diakses 2 Januari 2016].
- Wenzel, H.-G., 1985. *Hochauflösende Kugelfunktionsmodelle für das Gravitationspotential der Erde*. Hannover: Wissenschaftliche Arbeit University of Hannover Nr. 137.
- White, J. V. et al., 2007. *Temporal controls and resulting variations in oligo-miocene carbonates from the East Java basin, Indonesia: examples from the Cepu area*. Jakarta, Indonesian Petroleum Association.
- Whitman, W. W., 1991. A micragal approximation for the Bullard B—earth's curvature—gravity correction. *Geophysics*, 56(12), hal. 1980-1985.
- Wilcox, R. E., Harding, T. P. & Seely, D. R., 1973. Basic Wrench Tectonics. *AAPG Bulletin*, 57(1), hal. 74-96.
- Xia, J., Sprowl, D. R. & Adkins-Helgeson, D., 1993. Correction of topographic distortions in potential-field data: A fast and accurate approach. *Geophysics*, 58(4), hal. 515-523.



- Zahirovic, S., Seton, M. & Müller, R. D., 2014. The Cretaceous and Cenozoic tectonic evolution of Southeast Asia. *Solid Earth*, Volume 5, hal. 227–273.
- Zhang, R. Y. & Liou, J. G., 1998. Dual origin of garnet peridotites of Dabie-Sulu UHP terrane, eastern-central China. *Episodes*, 21(4), hal. 229-234.
- Zwillinger, D., 1997. *Handbook of Differential Equations*. Edisi ke-3. London: Academic Press.