

REFERENCES

- Al-Chalabi, M. (2014). *Principles of seismic velocities and time-to-depth conversion*. Houten: EAGE Publications, xiv – 488 pages.
- Ansari, H., Motafakkerfard, R. and Riahi, M. (2014). Comparing Geostatistical Seismic Inversion Based on Spectral Simulation with Deterministic Inversion: A Case of Study. *Iranian Journal of Oil and Gas Science and Technology*, Vol. 3 (2014), No. 1, pp. 01-14. <http://ijogst.put.ac.ir/>
- Avseth, P., Mukerji, T. and Mavko, G. (2010). *Quantitative Seismic Interpretation: Applying Rock Physics Tools to Reduce Interpretation Risk*. Cambridge University Press, 408 pages. ISBN-13: 978-0521151351
- Backus, G. and Gilbert, J. (1967). Numerical applications of a formalism for geophysical inverse problems: *Geophy. J. Roy. Astr. Soc.*, 13, 247-276.
- Backus, G. and Gilbert, J. (1970). Uniqueness in the inversion of inaccurate gross earth data: *Phil. Trans. Roy. Soc. London*, 266, 123-192.
- Baur, J., Sutherland, R. and Stern, T. (2014). Anomalous passive subsidence of deep-water sedimentary basins: a pre-arc basin example, southern New Caledonia Trough and Taranaki Basin, New Zealand. *Basin Research* - **26**: 242–268. [doi:10.1111/bre.12030](https://doi.org/10.1111/bre.12030).
- Bianco, E. (2014). Geophysical tutorial: Well-tie calculus. *The Leading Edge*, 33, no. 6, 674–677, <http://dx.doi.org/10.1190/tle33060674.1>.
- Bisaso, I. (2011). *Calibration of Seismic and Well Data towards Improved Quantitative Seismic Reservoir Characterisation of the Triassic to Middle-Jurassic Gullfaks Reservoir Units of the northern North Sea*. Master of Science Thesis. Petroleum Geophysics. University of Bergen.
- Bosch, M., Mukerji, T. and Gonzalez, E. (2010). Seismic Inversion for reservoir properties combining statistical rock physics and geostatistics: a review. *Geophysics*, Vol. 75, P 75A165-75A176.

- Boyer, S. and Mari, J-L. (1997). *Oil and Gas Exploration Techniques: Seismic Surveying and Well Logging*. Institut Français du Pétrole. Éditions Technip – Paris.
- Castagna, J., Batzle, M. and Eastwood, R. (1985). Relationships between compressional-wave and shear-wave velocities in clastic silicate rocks. *Geophysics*, 50, 571–581.
- Castagna, J., Batzle M. and Kan T. (1993). Rock physics - The link between rock properties and AVO response in Castagna, J.P., and M. Backus, Offset dependent reflectivity, Theory and Practice of AVO analysis: SEG, 135-171.
- Contreras, A., Torres-Verdin, C., Kvien, K., Fasnacht, T. and Chesters, W. (2005). AVA Stochastic Inversion of Pre-Stack Seismic Data and Well Logs for 3D Reservoir Modeling. EAGE 67th Conference & Exhibition – Madrid, Spain, 13 – 16 June 2005.
- Cooke, D. and Cant, J. (2010). Model-Based Seismic Inversion: Comparing Deterministic and Probabilistic Approaches. *CSEG Recorder*, APR, Vol. 35, N. 04.
- Cooke, D. and Schneider, W. (1983). Generalized linear inversion of reflection seismic data. *Geophysics*, 48, 665–676.
- Costain, J. and Çoruh, C. (2004). *Basic Theory of Exploration Seismology*. Elsevier, The Netherlands.
- de Bock, J., Perry, S., Webby, D. and Goodin, B./Petroleum Corporation of NZ Exploration Ltd. (1991). Appraisal of the Maui-4 and Moki-1 oil discoveries PML38144 and PML38145. Ministry of Economic Development, New Zealand. Unpublished Petroleum Report PR1800.
- Debeye, H., Sabbah, E. and van der Made, P. (1996). Stochastic Inversion. Presented at 65th Annual International SEG Meeting, Denver, USA.
- Doyen, P. (2007). *Seismic Reservoir Characterization: An Earth Modelling perspective*. European Association of Geoscientists and Engineers (EAGE), 255 pages. ISBN 978-90-73781-77-1.
- Faust, L. (1953). A velocity function including lithologic variation. *Geophysics*, 18, 271–288.
- Francis, A. (2005). Limitations of Deterministic and Advantages of Stochastic Seismic

Inversion. Paper Presented at the Canadian Society of Exploration Geophysicists, Telus Convention Centre, Calgary.

Gardner, G., Gardner, L. and Gregory, A. (1974). Formation velocity and density: the diagnostic for stratigraphic traps. *Geophysics*, 39, 770–780.

Grain, S. (2008). Palaeogeography of a Mid Miocene Turbidite Complex, Moki Formation, Taranaki Basin, New Zealand.

Gresko, M., Jordan, D. and Thompson, P. (1992). Sequence stratigraphic analysis of the Tangaroa Sandstone, northern Taranaki Basin, New Zealand. In 1991 New Zealand Oil Exploration Conference proceedings: 234–244. Ministry of Commerce, Wellington.

Grijalba-Cuenca, A., Torres-Verdin, C. and van der Made, P. (2000). Geostatistical Inversion of 3D Seismic Data to Extrapolate Wireline Petrophysical Variables Laterally away from the Well. Paper Presented at the SPE Annual Technical Conference and Exhibition, Dallas, Texas.

Haas, A. and Dubrule, O. (1994). Geostatistical Inversion – a sequential method of stochastic reservoir modeling constrained by seismic data. *First Break*, 12 – no.11, 561-569.

Halliburton/Shell (Halliburton Australia Pty/Shell Todd Oil Services Limited) (1999). Maari-1 and Maari-1A Well Completion Report, PPL 38413. Ministry of Economic Development New Zealand. Unpublished Petroleum Report, PR1572.

Hampson-Russell. (2015). CGG Geoview Hampson-Russell software guides, assistant and release notes accessed from the HRS 10.0.2 software on 14/10/2017.

Higgs, K., King, P., Raine, J., Sykes, R., Browne, G., and Crouch, E. (2012). Sequence stratigraphy and controls on reservoir sandstone distribution in an Eocene marginal marine-coastal plain fairway, Taranaki Basin, New Zealand. *Marine and Petroleum Geology* – 32: 110–137. [doi:10.1016/j.marpetgeo.2011.12.001](https://doi.org/10.1016/j.marpetgeo.2011.12.001).

Jackson, D. (1972). Interpretation of inaccurate, insufficient and inconsistent data. *Geophys. J. Roy. Astr. Soc.*, 28, 97-109.

King, P. (2000). *New Zealand's changing configuration in the last 100 million years: plate tectonics, basin development and depositional setting*. Ministry of Economic Development.

- King, P. and Thrasher, G. (1996). *Cretaceous-Cenozoic geology and petroleum systems of the Taranaki Basin, New Zealand*. Institute of Geological and Nuclear Sciences, Monograph 13. 243 p. 6 enclosures. Lower Hutt, New Zealand: Institute of Geological and Nuclear Sciences Limited.
- Knox, G. (1982). Taranaki Basin, structural style and tectonic setting. *New Zealand journal of Geology and Geophysics*, 25: 125-140.
- Kroeger, K., Funnell, R., Nicol, A., Fohrmann, M., Bland, K. and King, P. (2013). 3D crustal-scale heat-flow regimes at a developing active margin (Taranaki Basin, New Zealand). *Tectonophysics* - **591**: 175–193. [doi:10.1016/j.tecto.2012.04.005](https://doi.org/10.1016/j.tecto.2012.04.005).
- Lindseth, R. (1979). Synthetic sonic logs – A process for stratigraphic interpretation: *Geophysics*, 44, 3-26.
- Margrave, G., Dong, L., Gibson, P., Grossman, J., Henley, D. and Lamoureux, M. (2003). Gabor deconvolution, extending Wiener's method to nonstationarity. *CREWES Research Report* 15.
- Mosegaard, K. and Tarantola, A. (2002). *Probabilistic Approach to Inverse Problems*. International Handbook of Earthquake and engineering Seismology (Part A). Academic Press, 2002, pages 237-265.
- Naghadeh, D. and Morley, C. (2016a). Wavelet extraction and local seismic phase correction using normalized first-order statistics. *J. Seism. Explor.* 25 163–76.
- Naghadeh, D. and Morley, C. (2016b). Source wavelet phase extraction. *Pure Applied Geophysics*. 173 1-22. <https://doi.org/10.1088/1742-2140/aa8710>
- Naghadeh, D., Morley, C. and Ferguson, A. (2017). Stochastic Gabor reflectivity and acoustic impedance inversion. *Journal of Geophysics and Engineering*.
- Nodder, S. (1993). Neotectonics of the offshore Cape Egmont Fault Zone, Taranaki Basin, New Zealand. *New Zealand journal of Geology and Geophysics*, 36(2), 167-184.
- NZPM (New Zealand Petroleum and Minerals) (2014). New Zealand Petroleum Basins, Maari-Manaia Oil Field. Revised Edition, p. 74. Available on: <https://www.nzpam.govt.nz/assets/Uploads/doing-business/nz-petroleum-basins-part-two.pdf>

- Oldenburg, D., Scheuer, T. and Levy, S. (1983). Recovery of the acoustic impedance from reflection seismograms. *Geophysics* 48 (10) pp 1318-1337.
- OMV (2017). Fact Sheet OMV New Zealand Ltd. July 2017 – OMV Upstream. Available on: https://www.omv.com/SecurityServlet/secure?cid=1255765169175&lang=en&swa_id=254474210503.22192&swa_site=
- Onajite, E. (2014). *Seismic data analysis techniques in hydrocarbon exploration*. Elsevier, USA.
- Pilaar, W. and Wakefield, L. (1978). Structural and stratigraphic evolution of the Taranaki Basin, offshore North Island, New Zealand. *Journal of the Australian Petroleum Exploration Association* 18 : 93-101.
- Palmer, J. (1985). Pre-Miocene lithostratigraphy of Taranaki Basin, New Zealand. *New Zealand Journal of Geology and Geophysics*, 28(2), p. 197-216.
- Palmer, J., Andrews, P. and Carter, M. (1988). Remaining Petroleum Producing Potential of offshore Taranaki Basin – a Review. *Petrocorp Technical Note 094*.
- Palmer, J. and Geoff, B. (1988). Taranaki Basin, New Zealand. *Active Margin Basins*: 269–290. [doi:10.1306/M52531C](https://doi.org/10.1306/M52531C).
- Pendrel, J. (2006). Seismic Inversion – a critical tool in reservoir characterization. *Scandinavian oil-gas magazine*, v. 5/6, pgs. 19-22.
- Quijada, M. and Stewart, R. (2007). Density estimations using density-velocity relations and seismic inversion. *CREWES Research Report – Volume 19* (2007).
- Reilly, C., Nicol, A. and Walsh, J. (2014). Evolution of faults in the Southern Taranaki Basin since the late Cretaceous: implications for hydrocarbon migration and accumulation. *Advantage NZ: Geotechnical Petroleum Forum*.
- Reynolds, J. (1997). *An introduction to applied and environmental geophysics*. Ed. Wiley - University of Michigan. 806 pages.
- Rider, M. (2002). *The Geological Interpretation of well logs*. 2nd Ed. Scotland: Rider-French Consulting Ltd.
- Russell, B. (1988). *Introduction to seismic inversion methods*. Course Notes Series, 2, SEG.

- Russell, B. (1991). *Introduction to Seismic Inversion Methods*. S. N. Domenico, v. 2.
- Russell, B. and Hampson, D. (2006). The old and the new in Seismic Inversion. *CSEG Recorder*, 312. No 12, 5-12.
- Sancervero, S., Remacre, A., de Souza-Portugal, R. and Mundim, E. (2005). Comparing deterministic and stochastic seismic inversion for thin-bed reservoir characterisation in a turbidite synthetic reference model of Campos Basin, Brazil. *The Leading Edge*, 24, 1168–1172.
- Saussus, D. and Sams, M. (2012). Facies as the key to using seismic inversion for modelling reservoir properties. *First Break*, 30(7), 45–52.
- Schlumberger/Shell (Schlumberger Geco-Prakla/Shell Todd Oil Services Limited) (1999). Maari 3D Seismic Survey. Ministry of Commerce New Zealand. Unpublished Petroleum Report, PR2598.
- Simm, R. and Bacon, M. (2014). *Seismic Amplitude*. New York, NY: Cambridge University Press.
- Singh, D., Kumar, P. and Sain, K. (2016). Interpretation of gas chimney from seismic data using artificial neural network: a study from Maari 3D prospect in the Taranaki basin, New Zealand. *Journal of Natural Gas Science and Engineering* 36(2006) 339-357. Elsevier.
- Smale, D. (1996). Petrographic summaries of Taranaki petroleum reports. *Institute of Geological & Nuclear Sciences Ltd* - Science report 96/1.
- Smith, S. (2013). Digital Signal Processing: A Practical Guide for Engineers and Scientists. *Demystifying technology series*. Ed. Newnes. Revised Edition. 672 pp.
- Strogen, D., Bland, K., Baur, J. and King, P. (2012). *Regional Paleogeography and Implications for Petroleum Prospectively, Taranaki Basin, New Zealand*.
- Tarantola, A. (1987). *Inverse problem theory – methods for data fitting and model parameter estimation*. Elsevier Science Publishing Co.
- Thrasher, G. (1992). *Last Cretaceous Geology of Taranaki Basin, New Zealand*. Victoria University of Wellington: Thesis. Retrieved 20 February 2015.

- Torres-Verdin, C., Victoria, M., Merletti, G. and Pendrel, J. (1999). Trace-based and geostatistical inversion of 3-D seismic data for thin-sand delineation: an application to San Jorge Basin, Argentina. In: *SEG Annual Meeting*, Expanded Abstracts.
- Treitel, S. and Lines, L. (1999). Past, present and future of geophysical inversion – a Y2K analysis. *CREWES Research Report* – Volume 11 (1999).
- Veeken, P. and da Silva, M. (2004). Seismic Inversion methods and some of their constraints. *First Break*, Vol. 2, P. 47-70.
- Veeken, P. (2007). *Handbook of Geophysical Exploration, Volume 37: Seismic Stratigraphy, Basin Analysis and Reservoir Characterisation*. Elsevier, Amsterdam.
- Velis, D. (2008). Stochastic sparse-spike deconvolution. *Geophysics* Vol. 73, No.1 (January-February 2008); P.R1-R9. 10.1190/1.2790584
- Walden, A. and White, R. (1998). Seismic wavelet estimation: a frequency domain solution to a geophysical noisy input-output problem. *IEEE Transactions on Geoscience and Remote Sensing*, vol. 36, no. 1, January, p. 287-297.
- Walker, R. (1978). Deep-water sandstone facies and ancient submarine fans: models for exploration of stratigraphic traps. *Amer. Assoc. Petroleum Geologist Bull* Vol. 62. No. 6, pp. 932-966.
- Watanabe, S. (2013). *Stochastic and Deterministic Inversion Methods for History Matching of Production and Time-Lapse Seismic Data*. Doctoral Dissertation in Petroleum Engineering. Texas A&M University, USA.
- White, R. (1997). The accuracy of well ties: practical procedures and examples. Expanded Abstracts, 67th SEG Meeting, Dallas, USA.
- White, R. and Hu, T. (1998). How accurate can a well tie be? *The Leading Edge* 18(8), pp. 1065-1071.
- White, R. and Simm, R. (2003). Tutorial: Good Practice in Well-ties. *First Break*, Volume 21- pp. 75-83.
- Wu, W-J. (2001). The advantage and significance of Prestack Migration. *SEG Annual Meeting*, 9-14 September, San Antonio, Texas. SEG-2001-1037.

Wu, H. (2015). *Deterministic and stochastic inversion techniques used to predict porosity: A case study from F3-Block*. Open Access Master's Thesis, Michigan Technological University. Available at: <http://digitalcommons.mtu.edu/etdr/60>

Yilmaz, O. (1987). *Seismic Data Processing*. Society of exploration Geophysics – Investigation in Geophysics. Tulsa, USA.



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved