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Presents

Tomographic Investigation in Indonesian Geothermal fields

By

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ABSTRACT:

Subsurface condition beneath geothermal field is crucial information needed, especially for development and reservoir monitoring purposes. This could be achieved by combining several data, including surface geological data, geophysical data and well information. Seismic investigation, which is a quite new implemented method in Indonesia, has been carried out in several developed geothermal fields in Indonesia. Besides determining precise hypocenter locations, the data is also processed by using tomographic approach in order to determine elastic parameter of subsurface. The results show that the velocity anomalies coincide well with the subsurface data available in the fields. This approach could be a new hope in obtaining information related to predicted good permeability beneath a geothermal field.

BIO:

Dr. Mohammad Rachmat Sule is a lecturer at the Faculty of Mining and Petroleum Engineering, Institut Teknologi Bandung (ITB) - Indonesia. He teaches courses at the Geophysical Engineering and Geothermal Engineering Study Programs. He received his B.Sc and M.Sc in Geophysics from ITB and Ph.D in Geophysics from Karlsruhe Institute of Technology - Germany. He coordinates several projects, including the cooperation between ITB, GFZ German Research Center for Geosciences and Star Energy Geothermal (Wayang-Windu) Ltd in developing new exploration strategies and technologies in geothermal fields. His recent work has been in the extension of high resolution seismic imaging for geothermal and petroleum. He is also the project manager of Gundih Carbon Capture and Storage (CCS) Pilot Project, the first ever implemented CCS Pilot Project in South and Southeast Asia.

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