Design and Simulation of Resistivity Tomography for Monitoring of CO2 Sequestration in Coal Seams belongs to Yubari Formation

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The CO_2 sequestration in coal seams project has been proceeded on schedule from 2003. to 2008 at Kawaminami area of Minami-Oyuubari, Yubari City. In this project, we could not established the monitoring to detect behavior of CO_2 gas injected in coal-bed, except using some high-precisioon tiltmeter.

It is designed resistivity tomography for monitoring of the behavior of injected CO_2 in coal bed in the project of CO_2 sequestration in coal seams. In this case, it is designed a electorode system using a plastic casing in monitoring and production bore holes. A resistivity measurements system is also designed.

It is not yet used in the field, but simulated by computed method using physical characters of Ishikari coal bed. This designed system is one example of a practical application of the CO_2 sequestration project.