



Time series analysis of hydraulic head and strain of subsurface formations in the Kanto Plain, Japan

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The hydraulic head and strain of subsurface formations have been monitored more than several decades in the Kanto Plain, Japan. Time series analysis of these data revealed that the relation between hydraulic head and strain observed in some monitoring wells could be modeled by linear poroelasticity. Based on the relations of time series data, the poroelastic coefficients were estimated. The obtained values were consistent with those from laboratory experiments reported in literatures.