

## Subsurface density structure in Southern Osaka Plain based on gravity and magnetic anomalies

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Geomorphological, geological and geophysical surveys have been carried out in the Osaka plain for the highly precise construction of a model to predict strong ground motion. In recent years, many seismic surveys were performed in the south of the plain. The outline of the basement configuration was estimated from the relationship between gravity anomaly and the depth of the basement. The depth of the basement inferred from the gravity anomaly was shallower than that from the seismic and micro tremor surveys at several points in the Osaka plain. The difference is considered the variation of density contrast due to some local distribution of the volcanic rocks. The magnetic anomaly indicates higher value at these points. The density structure was discussed from the gravity anomaly in consideration of the high magnetic anomaly area.

Keywords: gravity anomaly, magnetic anomaly, density structure, Osaka plain