Underground structure in Osaka Sedimentary Basin inferred from three dimensional gravity analysis

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In order to collect geological information as control points for gravity analysis, the distribution of some reflection layers – top of the basement rock, bottom of Ma-1 and Ma6, were obtained by comparing seismic profiles in Osaka bay with GS-K1 boring which reach up to the basement rock of the Osaka basin. The initial model of gravity analysis was estimated from the Bouguer anomaly removing regional gravity effect and result of the above mentioned comparisons. The density was calculated from the distribution of P-wave velocity, derived from seismic reflection. The model of underground structure in Osaka basin was obtained with reference to grid points of model having the residual gravity as low as possible, excluding control points.