

## Subsurface structure of northern Osaka basin based on borehole database

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Several large cities and metropolitan areas, such as Osaka and Kobe are located in the Osaka basin, which has been filled by the Pleistocene Osaka group and the later sediments. The basin is surrounded by E-W trending strike slip faults and N-S trending reverse faults. The basin consists of granitic basement and overlaying thick unconsolidated sediment called as the "Osaka Group". Several marine clay layers (Ma-1 to Ma13) of the Osaka Group are key layer for stratigraphy and are assigned to the oxygen isotope events. An interval accumulation rate between two marine clay layers represents a cycle of eustatic sea level changes, and thus indicates a tectonic subsidence rate.

Kansai Geo-informatics Network has compiled a large number of borehole data and has constructed borehole database. The many borehole data have been interpreted by compared with several geological investigated borehole and extend the lithological and geological information in lateral direction. The distribution of interpreted marine clay layers (Ma9 to Ma13) was investigated in the northern part of Osaka. The tectonic subsidence rates represent differential subsidence around the Uemachi fault and branched flexure in detail.

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