

## Basement structure in the Kanto Plain, central Japan

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The basement of the sedimentary basin in the Kanto Plain, especially in its western half, is characterized by asymmetrical concavity structure. A number of graben and half-graben were formed under extension stress field during Japan Sea opening (ca. 19-15 m.y. ago), which resulted in this concavity structure below the Kanto Plain. The computer simulation suggests that long-period ground motions of around 4 second components would be amplified by such deep concavity structure. Analogue model of the basement structure in the Kanto Plain was made, by which we can easily understand a characteristic structure of the basin bottom and close relationships between active faults appeared on the surface of the plain and abrupt change in depth of subsurface basement. The gentle slope and plain structure of the basement is also recognized in the northeastern part of the Kanto Plain, which probably formed by erosion before the accumulation of the Kazusa Group (fore-arc basin deposits) at ca. 3 m.y. ago.

