On the modeling of deep sedimentary structure beneath the Osaka plain (3)

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An extensive seismic survey was conducted in the Osaka Plain. We compiled these geophysical data and revealed 3-D basin structure model in this area by using bi-cubic B-splines. According to use of bi-cubic B-splines, it was difficult to represent the interface at a sudden change like a fault. For modeling of the 3-D basin structure around the Rokko and the Uemach fault area, these area was divided by 4.5km*4.5km small region. The baserock configuration of the 3-D structure model corresponded with the gravity anomalies. We calculated synthetic seismogram of aftershock caused by Hyogo-ken Nanbu earthquake by using the 3-D basin structure model. The synthetic seismogram was in qualitative agreement with observed one.