

Crustal Structure in the Kinki District from Seismic Explosion Experiments

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Seismic explosion experiments of the Fujihashi-Kamigori profile in 1989, the Keihoku-Seidan profile in 1995 and the Shingu-Maizuru profile in 2004 were carried out in the Kinki district, western Japan. We try to determine a wide range crustal structure in the Kinki district by combining wide-angle reflection analysis and the refraction analysis. As a result, we observe the obvious reflection surface to a depth of about 10km and 25km just under the Kinki district by reflection analysis. Furthermore, we can detect the northern inclined velocity boundary to a depth of 20-25km by using the technique of ray tracing. This boundary is consistent with S-wave reflector observed under the central Kinki district (Katao, 1993).