

Leveling Survey carried out across the Muroto Peninsula, Kochi, Shikoku, Japan in 2001-2002.

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It is widely known that the vertical crustal movements around the Muroto peninsula, Kochi, Shikoku, Japan show characteristic pattern in connection with crustal activities around the Nankai Trough. However, the leveling survey only along the coast cannot reveal the pattern of vertical crustal movements across the peninsula.

Therefore, a leveling route across the Muroto peninsula was set up in July 2001. The leveling route was formed by an array of 84 bench marks along 'Route 493' and it connected two bench marks established by Geographical Survey Institute on the both sides of the peninsula near the coast.

Leveling surveys were carried out by using a digital level 'Leica NA3000' and invar staves (3m) in December 2001, March, September and November 2002. Total distance was 46.7 km (including 20 km of double leveling). Maximum height difference in the route was 433 m. The result obtained by the leveling survey is shown. In future, successive leveling will reveal the pattern of the vertical crustal movement across the peninsula.

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