

## 3D velocity structure in and around the source region of the 2000 Western Tottori Earthquake

# Yoshiaki Maeda[1], Takuo Shibutani[2], Hiroaki Negishi[3]

[1] Rcep Dpri Kyoto Univ., [2] RCEP, DPRI, Kyoto Univ., [3] NIED

We have determined a three-dimensional P- and S- wave velocity structure in and around the source region of the Western Tottori earthquake using the tomographic method of Zhao et al. (1996) to invert arrival times from more than 1000 local earthquakes ordinarily recorded from 1985 to 1997. Through the results, we try to discuss why the earthquake occurred that region.

We arranged the temporary short-period network (an array of about 50 stations by a cooperative effort from various universities) to detect the aftershocks.

Using the data from the aftershocks, we will determine a detailed three-dimensional P- and S- wave velocity structure and compare the structures before and after the mainshock.

On October 6, 2000, the earthquake ( $M_w=6.6$ ,  $M_j=7.3$ ) occurred in Western Tottori Prefecture, Japan.

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