Recent Study on the Resistivity Structure in the Eastern Part of San'in Region, Southwestern Honshu, Japan

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The 2000 Western Tottori earthquake happened at 13:30 on Oct. 6th in 2000. This presentation gives a summary of the wide band MT investigation which was carried out in the focal region and the central part of Tottori prefecture in order to determine the deep crust resistivity structure, just after the earthquake has happened. The observational results are compared with the structure to be already obtained in the other eastern part of San n region(the eastern part of Tottori pref.) and the relation with seismic activity is considered.

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An assumption as for the cause of this earthquake, that is "there is a deep crust fluid in San-in region. The fluid causes a big earthquake like the Western Tottori earthquake and also causes micro seismic activity with a linear distribution in this region." is thought out. The purpose of this study is to examine the reasonability of this assumption.

If "the deep crust low resistivity region" which was obtained by the resistivity structure investigation in the eastern part of San-in region could be replaced by "the deep crust fluid", it would be shown that the assumption is qualitatively correct. However, a physical model in which "the deep crust low resistivity region" can be quantitatively replaced by "the deep crust fluid", has not been obtained.