Seismic reflection surveys of crustal structures and their contributions to the research on the structural development

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COCORP demonstrated dramatically the effectiveness of the seismic reflection method in revealing crustal structures by the excellent imaging of the deep structure of the Wind River Thrust in 1977. Since then the method has spread worldwide as a powerful tool for the research of crustal structures. In Japan Yoshikawa (1987) obtained the first seismic reflection profile of the gently N-dipping Median Tectonic Line. That study dispelled the traditional idea that the Median Tectonic Line dips at a high angle. Many seismic reflection studies have been conducted to reveal crustal structures after Yoshikawa's pioneering work, especially since the Hyogoken-nanbu earthquake in 1995. In this talk, we will introduce the excellent results of the seismic reflection surveys and discuss their significance in reconstructing the structural development of the Japanese islands.