

Seismic reflection surveys around the southern part of hypocentral area of 2003 Miyagi-ken Hokubu earthquake (part2)

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We conducted seismic reflection surveys in the hypocentral area of 2003 Miyagi-ken Hokubu earthquake. The line2 is 6km long along the coast between Hamaichi of Naruse town and Omagari of Yamoto town and the line3 is 2.3km long between Tateshita and Shitanbashiri of Yamoto town. The main target is the southern extension of the Asahiyama flexure that is very close to the hypocenters of the earthquake. Parameters of the surveys are as follows.

Seismic source:P-wave Minivib, Sweep frequency:10-80Hz, Shot point interval:5m, Receiver:10Hz, Receiver point interval:10m, Grouping:12elements/10m, Spread:end-on 10m-1440m, Recording system:DAS1, number of channel:144ch, CMP interval:2.5m. The surveys were carried out in December 2003 and preliminary data processing was applied to the seismic data. In the line2, we have uneven reflectors at 0.3s in two way time and a gentle synclinal structure below them which reaches 1s in two way time, except for the east dipping reflectors in the western edge. In the line3, almost all reflectors dip east. By the meeting, we will process the data in detail to obtain clear images of the southern extension of the Asahiyama flexure.