Shallow subsurface structure in the Kujukuri coastal plain, Chiba Prefecture

*Kazuo Yamaguchi[1], Shinobu Ito[1], Sawako Kinoshita[1]

1. Geological Survey of Japan, AIST

Seismic reflection surveys were conducted at three sites in the coastal area of the Kujukuri plain, Chiba prefecture.

Reflectors near the bottom of the alluvial sediment are very flat in a seismic section of Kujukuri town, but they are neither flat nor smooth and have concaves considered to be buried valleys in seismic sections of Yokoshibahikari town and Asahi city. Bellow the alluvial sediment, reflectors are discontinuous and do not have specific dips in seismic sections of Kujukuri town and Yokoshibahikari town. On the contrary, reflectors are perceived between near subsurface and the top of pre-Tertiary basement which reaches 900m deep in Asahi town. They are very continuous, show conformity and parallel bedding. The deeper are the sediment layers, the larger are their dips and thickness. The top of pre-Tertiary basement is very clear and dips southwestward.

High angle faults are interpreted in seismic sections of the three lines, especially they are remarkable in Asahi town.

Discontinuous parts of reflectors are perceived on the seismic sections of Kujukuri town and Yokoshibahikari town. They may correspond to the reservoirs of natural gas.

Keywords: Kujukuri coastal plain, seismic reflection survey, Alluvial base, burried valley, Kazusa group

