S221-P012 Room: Poster Session Hall Time: May 18

Recent 1 m.y. crustal movements off the Tokyo Bay-side coast of the southern part of the Boso Peninsula.

Hiroshi Furuya[1]; Akinori Hashima[2]; Noriko Tsumura[3]; Toshinori Sato[4]; Takahiro Miyauchi[5]; Koji Kameo[6]; Makoto Ito[7]; Tanio Ito[8]; Naoshi Hirata[9]; Hiroshi Sato[9]; Ryoyu Arai[10]; Shuji Yamamoto[11]; Shintaro Abe[12]

[1] Grad. Sci., Chiba Univ.; [2] Earth Sci, Chiba Univ; [3] Grad. School of Sci., Chiba Univ.; [4] Chiba Univ.; [5] Earth Sci., Chiba Univ.; [6] MBRC, Chiba Univ.; [7] Earth Sciences, Chiba Univ.; [8] Dept. Earth Sciences, Fac. Sci., Chiba Univ.; [9] ERI, Univ. Tokyo; [10] KGE; [11] INPEX Inc.; [12] ADEP

The southern part of the Boso Peninsula and its surroundings are one of the best regions for the research of crustal movements with disastrous earthquakes attacked to the Tokyo metropolitan area, because records of the movements are expected to have been well preserved in Pleistocene trench slope sediments overlying Mio-Pliocene accretionary complexes. This is the great advantage in studying long-term crustal movements over the conventional method restricted within both geodesy and geomorphology. First of all, we concentrate our efforts to obtain basic data on the recent 1 m.y. crustal movements. Thus we made a shallow marine seismic reflection survey off the Tokyo Bay-side coast of the southern part of the Boso Peninsula in September, 2008. Its specifications are as follows. A 20-km-long seismic line was running from off Kanaya to the Tateyama Bay in N-S direction, and a 6-km-long in the Tateyama bay in E-W direction. The streamer cable was 300 m long with 24 channel hydrophones. Air-guns were shot at intervals of 12.5 m.

Although our analyzing works are still in progress, we specify the two groups of trench slope sediments; one is equivalent to the Higashinagata formation and the other to the Toyofusa group. The bases of the former and the latter correspond to 0.7 and 1.0 m.y, respectively (Kotake et al., 1995), considering from the velocity data in Boso 2002 (Mext, 2003). The horizons of 0.7 and 1.0 Ma are essentially significant to reconstruct the history of crustal movements during recent 1 m.y.