

Crustal uplift with tilting of the Shimousa Upland – Boso Peninsula, Northeast Japan, recorded in Holocene coastal terraces

Takahiro Miyauchi[1], Masanobu Shishikura[2], Tomoo Echigo[3]

[1] Earth Sci., Chiba Univ., [2] GSJ, [3] Human and Earth Science Grd., Chiba Univ

Tectonically active zones in late Quaternary, e.g. the Kashima - Boso uplift zone, exist in the southeastern part of the Kanto Plain in the Northeast Japan outer arc. However, their recognition, modes and components are uncertain in nature. We carried out the decomposing components of uplifting, based on heights of coastal terraces, facies analysis and radiocarbon dating of their related sediments. We clarified that the upper crust underlying the Shimousa Upland – Boso Peninsula has uplifted, accompanied by northward tilting (1/5000). Its tilt direction possibly changed, compared with northwestward tilt deduced from Pleistocene strata and terraces. Such a large size deformation horizontally affecting 50km and over suggests non-seismic regional crustal movements with long wavelength.

Tectonically active zones in late Quaternary, e.g. the Kashima - Boso uplift zone, exist in and around the southeastern part of the Kanto Plain, situated in the Northeast Japan outer arc. However, their recognition, modes and components are uncertain in nature. We carried out the decomposing components of uplifting, based on heights of coastal terraces, facies analysis and radiocarbon dating of their related sediments. As results, we clarified that the upper crust underlying the Shimousa Upland – Boso Peninsula has uplifted, accompanied by northward tilting (1/5000). Its tilt direction possibly changed, compared with northwestward tilt deduced from Pleistocene strata and terraces. Such a large size deformation horizontally affecting 50km and over suggests non-seismic regional crustal movements with long wavelength.