Submarine active fault and uplift of the northern part of Sanriku coast

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The coastal area around Kuji city, northern part of Sanriku coast, has been subsided for several decades and a characteristic co-seismic subsidence is observed there in 2011. However, marine terraces are well developed along the coast, which imply that the coastal area has been uplifted since middle Quaternary. The marine terrace surfaces around Kuji city, are classified into H1~H5 surfaces and M surface. The M surface is correlated with that formed in MIS 5e. The heights of the former shorelines of H2~H5 and M surfaces are, respectively. A wide flexural scarp tilting toward east is found on H2~H5 and M surfaces. It is reasonable to assume that west-dipping submarine active fault may dislocate these marine terrace surfaces and play important role in the coastal uplift.

Keywords: submarine active fault, marine terrace surface, flexure, Sanriku coast