

Former shoreline height and Active Faulting around Obama Bay, Fukui, Central Japan

WATANABE, Mitsuhsisa^{1*}

¹Toyo Univ.

I examined the distribution of marine terrace surface assigned to the oxygen isotope stage 5e along the coast around Obama Bay, Fukui Prefecture, central Japan. The marine surface is recognizable on the western and southern coast of Obama bay, which indicates only southwestern coast has progressively uplifted. There is no marine terrace surface along the NE coast of the bay. This strongly suggests that an active fault divides the bay just on the extension of the FO-A fault and the Kumagawa fault. The FO-B and FO-A fault are left-lateral active fault trending NW-SE direction. The Kumagawa fault trending WNW-SES direction display the same vertical displacement as them and SW hanging-wall uplift. These active faults composing of an extensive active fault ca. 65-km long across Obama bay displaying distinct trace jog close to the mouth of the bay (Nokogiri-zaki point). Height distribution of the former shoreline on the marine terrace surface shows the uplift pattern in this area. Comparing the uplift pattern with calculated displacement based on the dislocation theory, the fault model mentioned above explains the general features of the crustal deformation.

Keywords: marine terrace surface, former shoreline, submarine active fault, calculated displacement, Obama bay