A quantification of witness evidences before the 1946 Nankai earthquake

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A long term vertical crustal movement before the 1946 Nankai earthquake was obtained by combined two kinds of data which were the leveling by the Geographical Survey Institute(GSI) and the survey by the Hydrographic Bureau(HB). Just before the 1946 Nankai earthquake, many witness evidences such as decreased well water were collected by Umeda and Itaba(2010). At Saga district of Kuroshio town in Kochi prefecture, the subsurface water structure was investigated and an equation of \(d^{sup}2/sup} = 90.8h\) was obtained based on the model presented by Umeda et.al.(2010). \(d\) is an amount of decreased well water and \(h\) is a vertical crustal change. This relation suggests that a crustal uplift of 0.05m induces a 2.1m decrease in well water.

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