

## Marine terraces composed of the Ryukyu Group, Tokuno-shima island, induced mega earthquakes

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The Quaternary Ryukyu Group in Tokuno-shima island is divided into the Itokina (1.5Ma), Kinoko (0.9Ma?), and Kametsu Formation(0.2 Ma??), and each constitutes marine terrace. The boundary of the Itokina and Kinoko formations are terrace cliff, and the latter abuts the former. The succession indicates successive subsidence, but three times major uplift is expected to form three terraces. The uplift should have associated major reverse faulting, mega earthquake, and tsunami, all of which occurred along the Ryukyu trench.

Keywords: Tokuno-shima island, Ryukyu Group, 1.5 Ma Itokina Formation and higher terrace, Kinoko Formation and middle terrace, Kametsu Formation and lower terrace, subsidence by normal faulting, uplift by reverse faulting, associated mega earthquake