Tectonics of Hakone volcano and its relation to Manazuru micro-plate

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The present Manazuru micro-plate (MZP)(Koyama,1995), which has been since 150ka, is bounded by the Kozu-Matsuda reverse fault(KMF), the Nishi-Sagamiwan fracture(NSF), the Tanna-Hirayama strike-slip fault(THF), and the Higashi-Izu monogenetic volcano group(HIMVG). HIMVG is a spreading center of MZP. Hakone volcano is situated in the center of a caldera and has been controlled since 150ka by the pull-apart magmatic plumbing system generated by the movement of THF. Contrarily, from 150 to 300ka, Hakone volcano comprised of an independent monogenetic volcano group(HMVG), which was a spreading center of MZP. The boundaries of MZP during this stage are KMF, NSF, HMVG, and probably the Shiozawa fault. The tectonic behavior of MZP has influenced the volcanic history of Hakone volcano.