

The relation between the magma plumbing system and the diversity of tholeiitic magma

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In this study we examined the structure of magma chamber and the magma plumbing pattern from temporal change of magma composition and eruptive sequence in sole activity. The magma compositions in three tholeiitic eruption (KzS ThS Oh6) progress from felsic (differentiated) to mafic magma. This eruptive sequence indicates that these magma formed by fractional crystallization have already coexisted before the eruption. So this is possibilities of constructing the stratified magma chamber in each eruptive episodes. From the compositional variation three eruptive magma differentiated in several depth, and each eruption episode is constructed by the different magma. Therefore, tholeiitic magma chamber don't have a long life, but individual magma chamber exists only one episode.