Magma system during Ikeda cakdera formation -Existence of multiple magma chamber and the eruption-

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The caldera-forming eruption of Ikeda caldera, southern Kyusyu is devided three stages on the basis of temporal variations in juvenile materials. Stage 1 is characterized by dark gray scoria, stage 2 is characterized by less dark gray scoria and stage 3 is characterized by white pumice and banded pumice. The evidence from major- and trace elements composition, mineral assembrage and their chemical compositions suggest that these products were deraved from magma mixing events and they should be issued not from a single magma chamber but from multiple magma chambers.