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SCG062-22

Room:IC

Time:May 27 17:45-18:00

## Deep structure of active volcanoes in southern Kyushu

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I investigated the stratigraphic relations between the tephra sequence and geologic evidence of ground shaking events during the 7.3 cal ka BP eruption of the Kikai caldera. The important points for the caldera-forming eruption are: the long dormant period is not an essential factor for the eruption, and some magmas of different compositions existed prior to the eruption. On the bases of the magma plumbing model of the Kikai caldera, the magma reservoir of the Aira caldera is storing silicic magma, whereas andesitic magma is passing nearby the main magma reservoir without any mixing. Ground deformation data around the Aira caldera suggest that the silicic magma has been stored since the latest eruption of ca. 30 ka, and that several tens km<sup>3</sup> of silicic magma has already accumulated in it.

Keywords: active volcano, caldera, crust