

Long-span geoelectric potential differences measured in and around Sakurajima Volcano

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The long-span geoelectric potential differences have been measured in Sakurajima and around Aira Caldera since May 1999 by using the telephone cables of NTT. The objective of this study is to reveal a rough sketch of the electrical resistivity structure beneath Sakurajima and the caldera, which is considered to be the main source for the magma supply system of Sakurajima Volcano. After the removal of Sq and tidal components from the measured voltages, magnetotelluric method was applied to the preprocessed data to estimate the subsurface electrical structure. The response functions of the geomagnetic field was estimated with high quality for the periods from a hundred to several thousands seconds. Characteristics of the subsurface structure will be discussed in the presentation.