

SVC050-24

Room:302

Time:May 23 16:00-16:15

## The second seismic survey round in Sakurajima Volcano

Tomoki Tsutsui<sup>1\*</sup>, Masato Iguchi<sup>2</sup>, Takeshi Tameguri<sup>2</sup>, Koichiro Saito<sup>3</sup>, Research Group of the Seismic Survey Round 2010 in Sakurajima<sup>2</sup>

<sup>1</sup>Graduate School of Akita University, <sup>2</sup>DPRI, Kyoto University, <sup>3</sup>Japan Meteorological Agency

The second seismic survey round in Sakurajima Volcano and the variation of reproduced seismograms are presented. The seismic survey rounds have been done in the northeastern part of Sakurajima Volcano since November 2008 in order to detect movement of underground magma. The pilot survey had been done on November 2008 and the first survey was carried out on December 2009.

The survey includes 14 shot points, 248 temporary stations and 39 participants. The geometry of the network was the same as that of 2009's survey. The shot points and almost all stations were well reconstructed. Charge size are 20kg and the charge was detonated in a single hole in all 14 shot points, which were the same condition as that of the previous year. Each station included a vertical motion sensor (4.5Hz) and the compact digital recorder LS8200SD. The observation was successfully finished at 245 stations except for failed three stations. Peak amplitude ratio ranges 0.83 to 1.52 with reference to 2009's seismograms. Variation in the seismograms will be reported with comparison to those of preceding years along the same lines, and with referring to volcanic activity in Sakurajima.

Member of Research Group of the Seismic Survey Round 2010 in Sakurajima: Tomoki Tsutsui, Takeshi Tameguri, Masato Iguchi, Jun Oikawa, Hiromitsu Oshima, Tokumitsu Maekawa, Hiroshi Aoyama, Sadato Ueki, Satoshi Hirahara, Kenji Nogami, Takao Ohminato, Mie Ichihara, Hiroshi Tsuji, Shinichiro Horikawa, Takashi Okuda, Hiroshi Shimizu, Takeshi Matsushima, Takahiro Ohkura, Shin Yoshikawa, Tadaomi Sonoda, Hiroki Miyamachi, Hiroshi Yakiwara, Shuichiro Hirano, Koichiro Saito, Koichi Suemine, Susumu Goto, Takamitsu Ikegame, Koji Kato, Shinichi Matsusue, Taisuke Kohno, Shingo Utsunomiya, Hirohito Goto, Ryuichi Watanabe, Yuki Maehara, Izumi Satoh, Ryudo Oyabu, Hidehiko Shimizu, Yusuke Yamashita

Keywords: Sakurajima Volcano, Volcano structure, Active volcano, Seismic survey, Underground movement detection