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Period of

2015/09/29 - 2015/12/28

Research Ga

Gas precursors of volcanic eruptions correlated

Theme with geophysical signals

Host

Stay

Research Minoru TAKEO

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Activity Report

I further express my gratitude to Prof. M. Takeo-san and to ERI for having allowed my second 3-month visiting stay with the Volcanological Research Center (VRC) between September and December 2015. During this period I could fruitfully interact with the VRC team and other ERI's scientists to strengthen the integration of geochemical (gas) survey into the monitoring networks of Asama and Izu-Oshima volcanoes, in order to better forecast their eruptions in future. In that perspective, we went altogether on Asama in October for the maintenance of existing sensors and for assessing the needs/sites of new sensors. We subsequently had a working seminar on those prospectives in ERI, widened to volcanologists from GSJ and GRC-Univ. Tokyo. Joint applications and publications are expected from these actions in the future. Unfortunately, measurements of the abundance and isotopic composition (13C/12C) of carbon dioxide in volcanic plumes of Asama and other Japanese volcanoes, planned with a mobile (Delta Ray) mass spectrometer, could not be realized because the spectrometer arrived after my departure. Otherwise, during my stay I gave a seminar on researches conducted on Vanuatu arc volcanism (Ambrym) and I was deeply involved in teaching: (i) to Asian graduate students during the first Asian Campus in Volcanology, held by early November near Mt. Fuji, and (ii) to Tokyo University-ERI graduate students for a course on « Risk management and scientific communication during volcano emergencies » in December. I especially thank Prof. Takeo-san, Morita-san and Mie Ishihara for their continuous scientific interest in correlated geochemical and geophysical precursors of volcanic eruptions and for their kind support during my stay.