

**COMPLEX GEOPHYSICAL OBSERVATIONS AT KARYMSKIY VOLCANO,  
КАМЧАТКА, IN AUGUST 2012**

**P.P. Firstov<sup>1</sup>, E.R. Makhmudov<sup>1</sup>, E.O. Makarov<sup>1</sup>, D. Fee<sup>2</sup>**

*<sup>1</sup>Kamchatka Branch of the Geophysical Service RAS, 683006,  
Petropavlovsk-Kamchatskiy, Piip 9; e-mail: firstov@emsd.ru*

*<sup>2</sup>Geophysical Institute, University of Alaska, Fairbanks, Alaska, USA*

The article presents new data from field observations at Karymskiy in August 2012, which were carried out by a complex of equipment allowing recording infrasonic fluctuations, aerodynamic noise and intensity of the atmospheric electric field and volumetric activity of underground radon. It is shown that integrated geophysical observations are quite informative to monitor explosive volcanic activity. The analysis of wave disturbances in the atmosphere (the aerodynamic noise, air shock waves) and seismic events accompanying the fragmentation of magma allow us to get an insight about the physics of the explosive process. The dynamics of volumetric activity of radon near to Karymskiy is correlated to the activity of the volcano, which indicates the perspective of such observations.

*Keywords: volcano, explosion, infrasonic fluctuation, aerodynamic noise, underground radon.*