Global electric circuit affected by Fukushima power plant accident

KAMOGAWA, Masashi¹*, KAKINAMI, Yoshihiro², TAKAHASHI, Yukihiro³, KIMURA, Yoshihisa¹

¹Dpt. of Phys., Tokyo Gakugei Univ., ²Institute of Seismology and Volcanology, Hokkaido University, ³Department of Cosmo-sciences, Graduate School of Science, Hokkaido University

Radioactive contamination occurred due to Fukushima power plant accidents on March 11, 2011. In this study, we investigate atmospheric electric field variation associated with radioactive material which affected global electric circuit. The observed data of atmospheric electric field, air-earth current, and radiation agree with global electric circuit model through the circuit simulation.

Keywords: Global electric circuit, Fukushima nuclear power plant accident, Atmosphere