

## Atmospheric electricity changes around the 2011 off the Pacific coast of Tohoku Earthquake

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We have observed atmospheric electricity parameter (atmospheric ion concentration and atmospheric electric field) for validation of "Lithosphere-Atmosphere-Ionosphere Coupling". We have installed COM-3700, produced by Com System Inc., to observe ion content concentration at Akishima (Tokyo), Kiyosumi (the southern part of Boso Peninsula) and Uchiura (the southern part of Boso Peninsula). Field mills to measure atmospheric electric field have been installed at Chiba University (Chiba) and Kiyosumi. Ion content concentration, atmospheric electric field and weather conditions (temperature, humidity, air-pressure and wind conditions) have also been observed simultaneously at Kiyosumi station. Therefore, we can verify relationship with variations among these parameters.

After the 2011 off the Pacific coast of Tohoku Earthquake(M9.0), anomalous increase of atmospheric ion concentration and decrease of atmospheric electric field have been recorded at our stations. It may response to increase of radioactive material in the atmosphere by the Fukushima Daiichi Nuclear Power Plant accident. We compare changes of atmospheric electricity parameter with those of radiation dose rate observed at the nearest monitoring-post.