

Atmospheric Electric Field Observation for Mechanism of Lithosphere-Atmosphere-Ionosphere Coupling Associated with Earthquakes

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Ionospheric disturbance associated with earthquakes can be detected by the Ionosonde and so on. The results of the Ionosonde and the other measurements would require the existence of the charged area on the ground surface as one of the possible interpretation. In order to understand the physical mechanism of the ionospheric disturbance, it is important to confirm the existence of the charged area on the ground surface. We have tried the measurement of the atmospheric electric field by using corona current. So far, we have installed five observation stations in Taiwan and six in Japan. We show the characteristic of our probe and system by the laboratory experiment and the relationship between the atmospheric electric field variation and the ionospheric disturbance.