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Study of the Lithosphere-Atmosphere-Ionosphere Coupling (Chemical cannel)

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Recently, Ionospheric anomalies possibly associated with large earthquakes have been reported by many researchers. These reports suggest the existence of ”Lithosphere- Atmosphere-Ionosphere Coupling (LAI coupling)”. For the LAI coupling, 3 cannels have been proposed; they are ”acoustic”, ”chemical”, and ”electromagnetic” channel. In this study, the chemical cannel is considered to be dominant and in order to understand basic characteristics of it, we observe ion content concentration, atmospheric electric fields, and meteorological parameters in the southern part of Boso Peninsula. 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). Atmospheric electric field and weather conditions (temperature, humidity, air-pressure and window conditions) have also been observed simultaneously at Kiyosumi station. We are now collecting fundamental data to understand variations. In our presentation, we will show you observed data and their possible relationship.