Observation of Ionospheric Disturbance by FM Radio Scattering Waves

Hironobu Fujiwara[1], Hideho Ofuruton[2], Masashi Kamogawa[3], Yoshi-Hiko Ohtsuki[1]

[1] Dep. of Phys., Waseda Univ., [2] Tokyo Metro. College of Aero. Eng., [3] Dep. of Phys., Tokyo Gakugei Univ.

Seismo-Ionospheric disturbance such as the decrease of the foF2 and the sudden appearance of the Es layer has been detected by using the Ionosonde. On the other hand, it is well-known that FM radio scattering waves mainly occur by the ionospheric irregularity and so on. Kushida and Kushida reported that there was the strong relationship between the appearance of the anomalous signals and the earthquake occurrence according to their empirical law when they detect FM radio scattering waves. Motivated by these results, we try to find the spatial-temporal relationship between the appearance of the Es layer or the other effects and the signals of the scattering waves.