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PEM032-P25

Room:Convention Hall

Time:May 27 10:30-13:00

## Observation of mesospheric Ca ion by mobile resonance lidar

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Many observations of metal atomic layers such as Na, Fe, K, Ca and Ca ion in the mesopause region have been conducted in many parts of the world. We have also observed several mesospheric metallic layers at Tokyo and Indonesia using resonance scattering lidars consisting of a dye laser and a Ti:Sapphire laser. Especially, in order to solve the formation mechanism of metallic sporadic layers occurred in the mesopause region, the simultaneous observations of Ca ion density, electron density, and wind are necessary. We have developed container based mobile resonance scattering lidar for observations of several mesospheric metallic atoms and an ion. We have started simultaneous observations with the resonance scattering lidar, an ionosonde, and the MU radar at Shigaraki.

Keywords: Ca ion, mesopause, lidar