

## Feasibility study of an applied sodium lidar observation technique for three dimensional measurement

# Takuya Kawahara[1]

[1] Faculty of Eng., Shinshu Univ.

A new lidar technique applied for the mesospheric sodium observation is discussed here. The data available is two-dimensional imaging data perpendicular to the laser beam in the altitude range of the sodium layer. The most prominent feature in this system is that the detector consists of several bundled small PMTs. The possible observation mode is photon counting with each PMTs. This enables us just to replace a single PMT to PMTs and keep the same observation technique used so far. In this presentation, a model study for the system is shown in some cases.