

Optical axis alignment between laser light and a receiver for a resonant scattering lidar observation

Taku D Kawahara^{1*}

¹Faculty of Engineering, Shinshu University

A method of laser light and a telescope alignment for a resonant scattering lidar is typically done by monitoring signal with an oscilloscope. The temporal signal intensity variation is seen on the screen when the screening is triggered by laser shots. In the case of a sodium lidar, we typically confirm the signal around 90 km which is all by resonant scattering. However, the method depends on how clearly one can see the signal from the Na layer. In this talk, a more practical alignment method is presented by watching not Na signal but Rayleigh signal.

Keywords: resonant scattering, lidar, laser, field of view alignment