

Initial results of daytime observation using an etalon for the Antarctic Rayleigh lidar (1)

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Monitoring the temperature from troposphere to mesosphere is vital, especially in the polar region for global warming and PMC. A Rayleigh lidar system was deployed at Syowa station for night-time temperature observation and started taking data. To upgrade the lidar for the daytime observation, we use an etalon as a simple and ultra narrow-band optical filter to reject a strong sunlight background. The test system has been built in Shinshu University. We report the initial results of the experiments.

Keywords: Antarctica, Rayleigh lidar, etalon, daytime observation