

## Multi-direction lidar system using a high power 589 nm coherent light in Tromso (2) image processing

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We developed an all solid-state, water-free, high-power Na lidar for the measurements at EISCAT radar site in Tromso (69N), Norway. The lidar is capable of obtaining sodium density with the time resolution as good as 1 min. Using this capability, 3-dimensional observation is possible with a meaningful time resolution. In this system, we monitor the sky image including the laser line through the telescope using a CCD camera. We plan to build the system to find the laser line image automatically and correct the laser direction. In this talk, we report this data processing program and show some preliminary results.

Keywords: sodium lidar, high power laser, 3-dimensional observation, image processing